

Manufacturers Record

Exponent of America



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Christmas: "Peace on Earth to Men of Good Will."

From the day when Job sang, "For I know that my Redeemer liveth, and He shall stand at the latter day upon the earth," the eastern world was looking forward to the coming of the time when the herald angels sang,

"Glory to God in the highest, on earth peace to men of good will."

"Behold, I bring you good tidings of great joy which shall be to all people, for unto you is born this day in the City of David a Saviour which is Christ the Lord."

As the eastern world ever looked forward to the coming of that Redeemer heralded by the angels' song, the modern world has for 1900 years looked back to that, the most stupendous event, so far as mankind can comprehend, in all the mighty activities of Heaven. Out of the hand of Almighty God have rolled the millions and the hundreds of millions of worlds which in their revolutions ever sing the "music of the spheres." But how small seems the creation of a material universe as compared with that incomprehensible act when the Creator of these worlds enwrapped Himself in mortality, and came down to earth to become the Redeemer of mankind!

The poet sang, "Ten thousand times ten thousand worlds,
In God's sight one soul outweighs them all."

Today "where'er the sun doth his successive journeys run" in Christian and in heathen lands alike the story of Christmas is told, even though in the fullness of its meaning all may not grasp the reality of that hour to which the old world ever looked forward, and to which the new world has ever looked backward.

All history of ancient days converged in the manger at Bethlehem: all history since then has diverged from that sacred spot.

At this Christmas season men and women everywhere take on a kindlier thought for their fellow men. Gifts to the poor and the suffering are poured out in unstinted measure. The love for little children grows keener in the thought of the love of Him who said, "Suffer little children to come unto me and forbid them not, for of such is the kingdom of Heaven." Your Christmas Day will be the sweeter, your own life the happier, your own children will sing a new song with sweet accord if you and they remember that as "God so loved the world that He gave His only begotten Son that whosoever believeth on Him should not perish, but have everlasting life," so you too will give, and give freely, of love expressed in good deeds and good works to all the poor and suffering with whom you can come in touch.

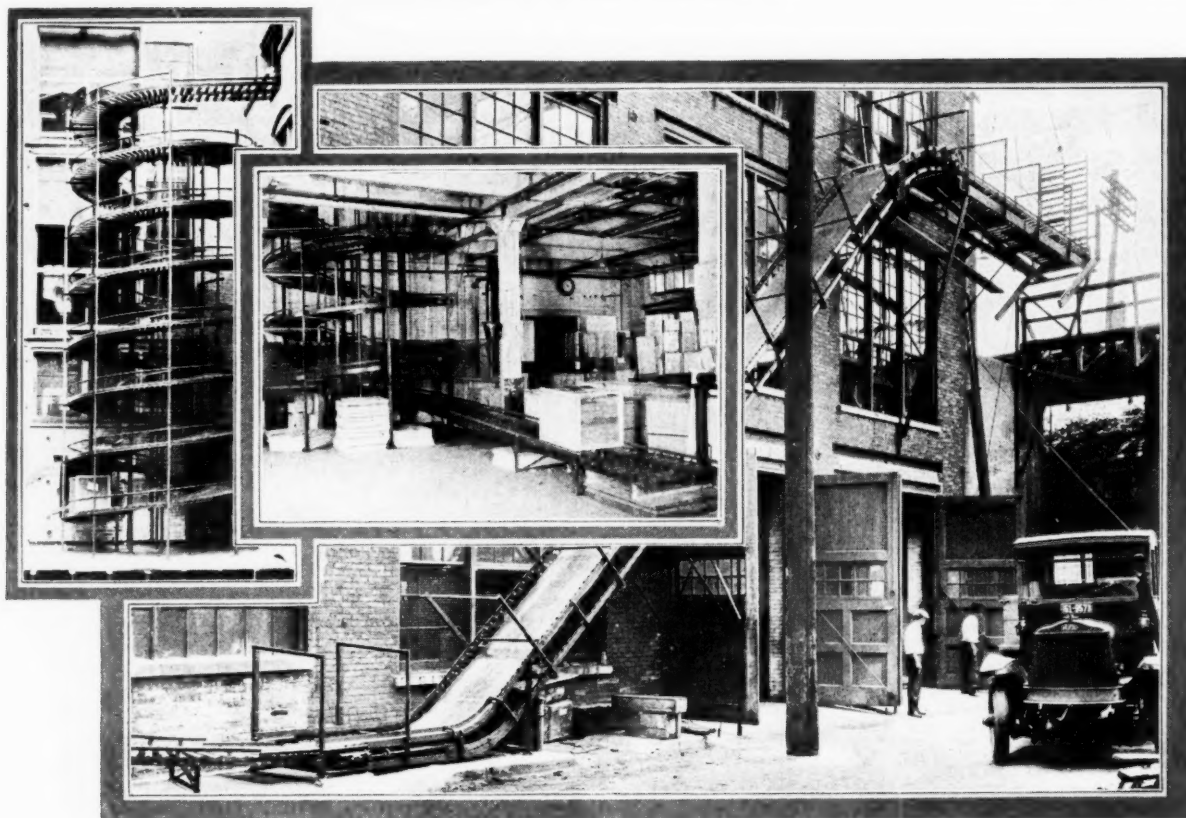
"Unto whom much has been given of him shall much be required."

"Inasmuch as ye did it unto one of the least of these, my brethren, ye did it unto Me."

Let there then be nowhere in our land today a suffering man, woman or child, poor and needy, in the home, or in the hospital, in health or in sickness, to which no word of Christmas cheer and Christmas joy has been brought. Let all the earth echo and reecho on this Christmas Day with songs of peace; holy songs. Let it not be a Merry Christmas, but a Holy Christmas; not a time of frivolity and jollity, except as they are touched and sanctified by that love which has enriched the world; that love which brought to the earth the Redeemer whom Job knew would some day come, and that love expressed in the thought "I know that my Redeemer liveth, and because He liveth I too shall live."

With reverence keener and deeper than we have ever felt before, with a full realization of the fact that the world must choose between Christ and Chaos, with a love for our fellow man kindled by the love of God for all mankind, let Christmas Day be made sacred to young and old, to rich and poor, to the well and to the sick, by the consecrated devotion that ministers unto all, that increases the love of mankind for little children, that touches the deepest chord of human sympathy for the sick and the suffering; that sings a song of gladness, the song of Job in advance of the Redeemer's coming, and catches the refrain of the heavenly chorus as it sang:

"Glory to God in the Highest,
On earth peace to men of good will!"



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RICHARD H. EDMONDS, President; FRANK GOULD, First Vice-President; VICTOR H. POWER, Second Vice-President;
I. S. FIELD, Secretary; J. ROBERT GOULD, Treasurer

RICHARD H. EDMONDS, Editor

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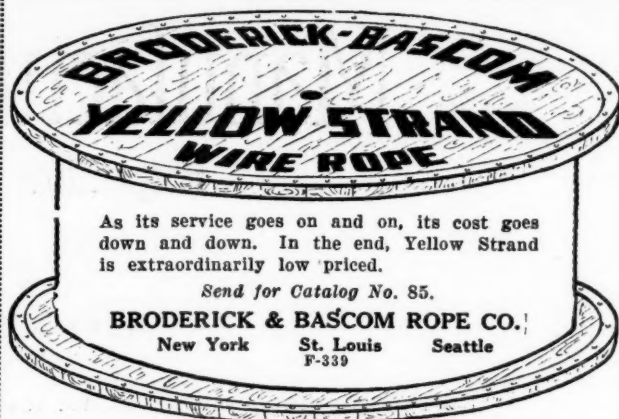
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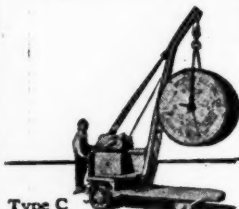
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A Strong Argument for Tax Exempt Securities.

EVERY argument which we have seen in favor of the proposed amendment to the Constitution to forbid the issuing of tax exempt securities by state and municipalities, has been fundamentally unsound. The arguments are plausible on their face but they will not bear close inspection.

Mr. Guy M. Walker a well known publicist of New York, sends to the MANUFACTURERS RECORD a copy of a letter written to Mr. C. W. Barron, of the Wall Street Journal, vigorously defending the right to issue tax exempt securities. In his letter Mr. Walker says:

"As you know Congressman McFadden has been attempting to get a measure through Congress providing for the abolition of the tax exempt character of government, state and municipal bonds.

"Some two and half years ago I wrote to Congressman McFadden protesting against his measure and giving him a little historical sketch showing why the tax exempt character had been given to this class of bonds, and why it was necessary in order to protect persons dealing with their government from fraud. Mr. McFadden wrote back saying that of the thousands of communications that he had received I would doubtless be surprised to know that mine was the only communication objecting to his measure. I wrote and told him I was not at all surprised, that twenty years ago I had been the only man in the country who had dared to protest against the action of the government in the Northern Securities Case and that I was laughed at, yet here the Esch-Cummins Bill had just been passed which was attempting to force the railroads to consolidate and recognize the economic folly and the terrible cost to the country of the Northern Securities Case.

"This movement to destroy tax exemption for government and other public securities is another one of those short-sighted, ill-considered propositions advocated by those who have no idea why tax exemption prevails or how or what will result if tax exemption is no longer granted.

"In the past, governments so constantly robbed or defrauded their subjects and citizens that no one would trust his government in a matter of business. The old theory that the king may do no wrong has actually been translated into our republican government to the extent that in law the government can do no wrong and you cannot sue the government nor get paid no matter how just your claim is until a Congress sufficiently beyond the reach of demagoguery will vote an appropriation to pay your claim. In the past when citizens loaned their moneys to their kings or their governments, the governments did not hesitate, first, to tax the income return until that was gone, and then to impose capital taxes until the principal itself was eaten up, and if a citizen or subject protested he was denounced as a traitor and treated as such, but in those countries where the English language is spoken

and where Anglo-Saxon ideals of personal rights prevail it no longer became possible for a king or a government to confiscate a citizen's property or to hang him as a traitor if he objected, and because successive kings, and successive administrations in republics, refused to be bound by any actions of their predecessors it became necessary to incorporate in our constitutions the provisions which protect a citizen now when lending money to his government from the bad faith or fraud of succeeding administrations.

"If our states should ever give up the right of protecting the bonds issued by them and their counties, cities, or other municipal corporations, from any federal tax or imposition, either as to income or principal, they will at once find that the federal government will proceed to impose on them such burdens that it will be utterly impossible from that time on for any state, county, or city to sell any bonds for any public improvement. Sewers will no longer be built and epidemics will break out, water supply and distribution will lag and cease, fire protection will be lost, no more schools will be built, no more libraries, police stations or fire houses, because federal impositions will so menace the holders of such county or city bonds that no one will care to buy them, and while the states and cities may grant to the bonds issued by them immunity from any income or capital levy by the state or the counties and cities, they will find themselves under the same compulsion that exists today on the part of business corporations, and in order to raise any money the states, counties and cities will have to promise to pay six, seven and eight per cent interest like any and all business corporations, and in addition will face the ridiculous proposition of being compelled to pay to their bondholders any federal income or capital taxes that may be imposed.

"The federal government will be looked on with suspicion. The proposition is already being urged to find some way to reach the income from bonds already issued that are guaranteed to be free from tax exemption. The proposition is one that involves gross fraud on the part of the government, and anyone who advocates it is deliberately proposing that our government shall violate every principle of good faith and defraud, if possible, the holders of these tax exempt bonds. New government issues will go unsold because each proposed issue will have to carry some especial provisions to protect against future administrations or future attempts to violate the terms of the issues then offered. For if the government can successfully rob the holders of existing tax-exempt bonds, why should any future purchaser of government bonds expect to have the government observe its promises or guarantees in the issues then offered?

"As has been shown repeatedly, once you grant the right to tax at all, that right exists on the part of the government to the extent of taxing everything there is of the subject taxed, and once you grant the government the right to tax either government, state or municipal bonds, you give the govern-

ment the right not only to tax all the income from those bonds but to confiscate all the principal sum as well.

"When this is understood as it will be by any person who has money enough to invest in a government bond he will refuse to deal with his government. Government improvements out of bond issues, like canal projects, great irrigation and reclamation projects, public buildings, and everything of that kind, will cease. Current taxes will mount enormously because the present absolute necessities will have to be provided for out of current taxes.

"At present when all other business languishes and construction ceases, cities and states have been able to raise money by selling tax-exempt securities, and by carrying on public works of some kind with the proceeds give some relief to idle labor, but if they ever give up the privilege of having their bonds exempted from federal taxation this avenue for relief will be gone and closed forever, and in periods of depression it will be impossible to carry on any public works for relief, and distress will be greater than ever before.

"I cannot understand the distressing bad faith of those who are seeking to defraud the present holders of tax exempt securities or the utter folly of those who would prevent the further issuance of such bonds by the governments, the states or the cities."

BACK TO THE OLD COVER.

SOME weeks ago we invited an artistic designer of newspaper covers to design a new coverpiece for the MANUFACTURERS RECORD. It has received the hearty commendation of a man who is regarded as the most artistic printer in the United States, and a number of our subscribers have commended the new cover which appeared for two weeks, but we are glad to say that so many of our readers are so deeply interested in this paper that they have voiced their opposition to the new design and have said they miss the dignity and simplicity of the old cover with its American eagle.

We are glad therefore to follow those who seem to be largely in the majority in opposition to the new cover and return to the old cover, and to be perfectly frank with our readers to say that from the moment the writer saw the new cover exactly as it appeared in print, although he had approved the design, he threw up his hands in horror and now rejoices that a sufficient number of our subscribers and advertisers have expressed their opposition to the new cover to justify us in returning to the old cover of dignity, carrying the force of Americanism in its very design.

NOVEMBER EXPORTS INCREASE AND IMPORTS DECREASE.

DURING November, the United States imported \$292,000,000 worth of merchandise, and exported \$404,000,000 worth, giving an excess of exports over imports for last month of \$112,000,000 compared with the \$88,194,000 excess exports for November, 1922.

The total value of exports for the eleven months ending November was \$3,745,186,460, or an increase of \$257,736,551 over the corresponding period of 1922. However, during the first eleven months of this year, the United States imported \$3,504,500,031 worth of merchandise, which is an increase of \$685,541,771 compared with the first eleven months of 1922. This gives us an excess of total exports over imports so far this year of \$240,686,425 compared with \$668,491,649 for the corresponding period of 1922.

A GLOOMY PICTURE OF ENGLAND PAINTED BY A LEADING ENGLISHMAN.

ARTHUR KITSON, one of the leading manufacturers of England and president of the British Banking Reform League, presents in a letter to the MANUFACTURERS RECORD, published in this issue, a doleful picture as to the business conditions prevailing in England. This letter from Mr. Kitson is in reply to an inquiry from the MANUFACTURERS RECORD asking him as to the outlook.

For many years Mr. Kitson as president of the British Banking Reform League has been an aggressive opponent of the financial methods of Great Britain and especially of the methods of the Bank of England under the domination of government influence. His predictions have all come true. The London Times recently published a letter from Mr. Kitson with the statement that he was a man of such national importance that his views could not be ignored though they were contrary to the views of that paper.

In a letter enclosing his article Mr. Kitson wrote: "Baldwin is undoubtedly the strongest and safest man that we have today in English political life. In my judgment, it would be disastrous not only for this country but for the world if Lloyd George again became Prime Minister."

Mr. Kitson's article, written prior to the election, expressed the hope that Mr. Baldwin would win, but unfortunately we believe for England, he lost, and it looks now as though the Labor Party, which has many very radical elements in it will to a very considerable extent dominate the situation in England and thus have its influence upon world affairs.

There is a lesson and a warning to the people of America in this English situation. Victorious in the war and with every possible reason why England next to the United States would be the most prosperous country on earth, it has for several years been suffering more than any other country perhaps except Russia, and for this no possible reason can be found except in some false economic policy. On its very face the fact that England, dominating one quarter of the world's area and having under its control about one quarter of the world's population, is yet a land of unemployment and poverty, while Continental countries which suffered to a greater extent than England have practically full employment of all of their people and are in more prosperous condition than Great Britain, indicates that there is something radically wrong with the financial or economic policy which has ruled in Great Britain.

Possibly the basis of these troubles may be found in the fact that five great banking institutions have practically absorbed the entire banking business of England with thousands of branches which have no independence of action or of thought. When the few men who dominate these five great banks with their tremendous financial and political power say what must and what must not be done, comparatively few men—and practically none of independent courage and backbone like Mr. Kitson—dare question their supreme authority.

The United States may well take warning and prevent the spread of branch banking in this country, which if continued would ultimately lead to the same autocratic dominating financial policy, ruled by a few men in the great cities of the country. The fetish of free trade in England has also found its full fruition in the disastrous condition of the empire. England, the mighty leader in world affairs in times past, must take account of itself and find the cause of its troubles and the remedy ere it be too late.

Interstate Commerce Commission Reverses Its Former Decision and Authorizes the Virginian Railway to Extend a Branch Line to Coal Property.

THE full board of the Interstate Commerce Commission has reversed the former ruling made by a Committee of that Board which forbade the building by the Virginian Railway of a short spur track to a coal property which the owners proposed to develop. When the ruling was announced last spring, based on the alleged fact that there were already too many coal mines in operation in this country with inadequate car equipment for handling the coal of existing mines, the MANUFACTURERS RECORD took the ground very emphatically that this decision undertook to make null and void the Constitution of the United States in that it sought by its power to prevent the development of a coal property and thus practically for the time being destroyed its value.

We said then that notwithstanding the technicality of the law under which the Committee acted, the broad principles which should guide the Interstate Commerce Commission should not permit them to refuse a railroad authority to build a short line in order to reach property to be developed, and that it was not the province of the Interstate Commerce Commission to decide whether there were too many coal mines in operation or not.

The excuse has been made that the Committee in reaching its decision took the ground that the Virginian Railway had made merely a formal request and had presented no argument to show why the privilege of this extension should be granted. In reply to that the MANUFACTURERS RECORD said that as the Virginian Railway had spent \$40,000 several years ago and only desired to spend \$20,000 more to complete this short track, no one for a moment could imagine that any argument was necessary to secure the approval of the Interstate Commerce Commission, and the application was regarded purely, we presume, as a formal matter merely because the law so required.

At that time we urged the Virginian Railway in the interest of the country as well as for its individual interest to protest against the ruling and to apply to the full board of the Interstate Commerce Commission. This was done, and the full board has now reversed the decision of last spring and granted that road permission to complete the short spur track.

It is stated that in reaching this decision the Commission declared that evidence had been produced showing conclusively that the railroad would be able to increase its coal tonnage extensively by reason of additional facilities acquired and anticipated, and that present and future public convenience and necessity required the new construction involved, and the railroad was authorized to proceed.

While having the highest opinion for the good judgment in most cases, and the unquestionable integrity of the members of the Committee that decided adversely last spring, we have never been able to see any fundamental reason whatever in behalf of the position then taken. The arguments which they have advanced are not to our mind correct in any particular. We do not believe that the law ever intended or that the law as it exists gives any right to the Commission to say that a railroad shall not make an extension of this kind, when in the judgment of its officers a new field for traffic can thereby be developed and an enlarged coal output secured at a lower cost.

If there are too many coal mines in existence as members of the Committee have claimed, many of them being unable to mine coal except at a high price, then the economic

way in which to change this situation is to permit low cost mines to be opened and in this way gradually eliminate the high cost mines. Any arbitrary attempt to do this by the regulation of railroad building is, we believe, contrary to good judgment, if not contrary to the Constitution itself.

In the detailed report of the Interstate Commerce Commission explaining the reason for reversing its decision information is given as submitted by the railway company as to the reasons why the road had been hampered in the handling of coal by the railroad strike and the conditions arising therefrom. It is also shown that the company is now building a new coal pier at Sewall's Point, Norfolk, at a cost of \$3,250,000, which will more than double the railroad's coal handling capacity at deep water, and that a contract has been made to electrify the line from Mullins, West Virginia, to Roanoke, a distance of 134 miles at a cost of \$13,000,000. These are given as the reasons for reversing the decision. There is not a single fact, however, in this statement by the Interstate Commerce Commission which that Commission could not have learned at the time of the former application if it had been seeking reasons for granting this permission instead of seeking reasons to prevent giving the railroad the authority to build.

The plea of the Interstate Commerce Commission Committee that none of these facts were presented to it at that time but that merely a formal application was presented without any argument in favor thereof, it seems to us, is a plea of extreme weakness.

If this committee had been eager to get at all facts it could have easily asked the railroad for all of the information that it now quotes as a reason for its reversed decision. Or if it had read the MANUFACTURERS RECORD it would have found all of this information as to electrification of the Virginian's lines and the enlargement of its coal shipping facilities at Norfolk and of its own knowledge it should have fully appreciated the difficulties under which the road had operated during the railroad strikes. Instead of doing this however, the Committee without investigation, without seeking any argument from the Virginian Railway without using any of the facts in regard to the conditions which it now mentions and which existed then just as they do now, acted upon preconceived notions that there were too many coal mines in operation and that it had the power to prevent the building of new railroads for the opening of new coal mines.

That position we regarded as extremely inimical to the welfare of the country, and esteeming as personal friends members of the Committee who rendered that decision, we regret the necessity of saying that in our opinion they acted without due judgment or consideration for the welfare of the public.

A NEW AGRICULTURAL CENSUS.

LAST year the MANUFACTURERS RECORD pointed out that the agricultural statistics of 1919 and 1920 were practically useless at the present time so far as values are concerned by reason of the tremendous difference in price between the high figures of 1919 and the lower prices ever since. At that time we suggested the importance of another census report on agriculture without waiting for the ten year period.

We are glad to see that this suggestion has been adopted, and Dr. H. C. Taylor, Chief of the Bureau of Agricultural

Economics, of the United States Department of Agriculture announces that as the various branches of American agriculture are now gradually working toward a more normal basis, it is planned to take in 1925 a complete census of all the agricultural interests of the country.

This census will enable the Agricultural Department to correct its figures up to 1925 and will give the country a better basis on which to make all calculations as to values of agricultural products and as to the value of farm lands than it has had since the last census was taken, and that was at the peak of high prices.

WORLD'S ECONOMIC CONDITIONS IMPROVING.

SUBSTANTIATING the statements which the MANUFACTURERS RECORD has recently published on a number of occasions with regard to the betterment of the economic conditions of the world, are cable reports from foreign countries to the Department of Commerce.

The report from India, issued under the date of December 8, says that the trade balance in India has been radically reversed in India's favor and optimism is general. Consul General Waddell of Calcutta cables to the Department:

"The substantial improvement noted in India's foreign trade the latter half of September continued through October. The general bazar business also improved, and a distinctly more optimistic attitude was noticeable than for several months. * * * * The increased demand for construction iron and steel was evidenced in an advance of 8000 tons in imports and in higher prices. Imports of motor vehicles also advanced 135 per cent compared with September returns. * * * * There was an unexpected demand for raw cotton to supply British mills which amounted to an increase of practically 62 per cent compared with September shipments."

Our own Lancashire correspondent, writing about the marked betterment which is taking place in the cotton trade of England, says:

"Owing to the improved trade position, it has been decided to abandon short time working in the Lancashire cotton trade. For over six months, spinning mills engaged on American cotton, operating 40,000,000 spindles, have only worked 24 hours a week instead of the usual 48.

"The Master Spinners Federation has taken a ballot of the employers as to the continuance of organized curtailment of output and the result shows that less than 66 per cent are in favor, whereas according to the rules of the Federation a proposal of this kind cannot be put into operation unless 80 per cent are in favor. This development is due to a larger trade done during the past month.

"Spinners have been enabled to clear their stocks of yarn and many firms have now fair orders on the books. It can scarcely be said that trade is yet profitable but there are now fewer losses. More remunerative trade and increased employment for the operatives is expected."

Unfortunately for American cotton mills, English and German spinners were wiser than those of our country and bought heavily of cotton months ago when the price was from 12 to 15 cents less than it is at present.

Cable reports to the Department of Commerce in regard to the British industry show that commodity prices are firm, that unemployment is decreasing, and that the ending of the boilermakers seven months' strike brightens the shipbuilding outlook.

Cable dispatches from Lancashire to the Department of Commerce show improvement in the cotton industry, though

this has not yet gone back to quite normal conditions. But the lumber market is reported as firm, with satisfactory prospects for the balance of the year and early next year, with consumption steadily improving and orders somewhat larger than usual.

"The outlook of coal and iron and steel trades," says the cable, "is brighter for the rest of the year, with strong continental inquiry for fuel with better export loading at all ports; and many steamers are waiting for berth room at Cardiff and Newcastle to load coal. Full colliery order books indicate a future loading pressure on steamers and berth room. The iron and steel industry is reported as better employed than during the previous six months, and steel prices were being advanced slightly during the past fortnight."

A large volume of internal business in Spain is reported in a cable to the Department, which says:

"Internal buying of textiles is good, but consumption of raw cotton and activity of the Barcelona textile mills has been reduced 50 per cent from last year by the competition of imported British goods. The metallurgical situation at Bilbao is improved, with unfilled orders for nine months and the prospect of additional orders for railway equipment. The mining industry has also been improved recently by the resumption of ore exports from Bilbao, and the prospects for an additional market for steel, iron, and coal resulting from the commercial treaty concluded with Italy to become effective December 10, which among other advantages gives Spain most-favored-nation treatment on metallurgical products.

"Recent abundant rains have caused excellent cereal crop conditions. The final crop statistics show wheat production considerably above the average for the past ten years. It is estimated that there will be a slight surplus over the country's needs for the coming year."

These are typical indications of the economic betterment which we have repeatedly pointed out of late as in evidence throughout the world. As we showed last week by official reports from Europe, unemployment is decreasing practically in every part of Europe except in Germany, and this all means a better economic condition for the whole world.

INCREASING SHEEP SUPPLY.

FOR many years there was a steady decrease in the number of sheep in the United States. Population steadily increased, but the number of sheep actually decreased, not merely the number per capita for the country's population, but the actual number of sheep grew less so rapidly year by year as to make it look like we would soon have almost a complete famine of American raised wool and mutton and lamb.

The Department of Agriculture now reports that under the existing tariff there has been during the last two years a big increase in the number of sheep, brought about by the stimulus of tariff protection and the active demand for wool. But notwithstanding this increase, the farm price of sheep has risen from the poverty figure of \$4.80 to \$7.50 a head, and the farm price of wool has increased from an average of 29c a pound in 1922 to 38c in the present year.

It looked for a long time as though the American people would have to do without mutton and lamb. But the tide has apparently turned under the influence of a protective tariff. The South especially is a field in which the sheep industry should be encouraged. If once this section would rid itself of some of the many thousands of common curs and other sheep-killing dogs the possibilities of sheep-raising to the benefit of the farmers and the meat consumers would be enormously increased.

THE COSTLINESS TO RAILROADS OF LACK OF COURTESY ON THE PART OF EMPLOYEES.

TWO ladies visiting Florida a few days ago went into a railroad ticket office in one of the leading resort towns of the state to inquire as to trains. The ticket agent was the only man in the office. He was leaning back in a chair with his feet on his desk eating his lunch. Without in the slightest changing his position and with a very indifferent manner he answered the questions put to him. But he never changed from his ungallant position nor showed any sign of courtesy.

A railroad freight agent in Alabama some months ago quoted a freight rate on hay from a shipping point on his line to New Orleans. As the shippers had received no notice of any change of rate, two months thereafter they offered to a New Orleans house 15 carloads of local hay based on the freight rate that had previously been quoted. The offer was accepted, but when they went to make the shipment they were notified that instead of the rate being 14c as had been quoted, it was 21½c causing the shippers, if they fulfilled their contract, to stand a loss of \$375 to \$500.

In correspondence on the subject the railroad freight agent admitted that a mistake had been made in quoting the lower rate, but then with supercilious impudence wrote to the shippers a letter in the course of which he said:

"I happen to know from personal knowledge that you have been shipping hay from ——— for a good many years, and during that time you should have learned a great deal about the question of rates, etc."

If a letter from a railroad official couched in such language as that is not calculated to stir the hostility of the man who received it to railroad people in general we do not know what is. An error had been made by this railroad agent. The least that he could have done in the matter under discussion was to show the utmost courtesy and express his regret at the mistake. And yet he presumed to criticize the shippers merely because they had been long time shippers, when that very fact should have caused him to realize that he was insulting an old customer. Possibly his error in quoting a wrong rate may have been excusable, but the spirit of his reply is wholly inexcusable. The shippers, who have sent to the MANUFACTURERS RECORD the full correspondence in the course of their letter say:

"We know that the Interstate Commerce Commission has ruled and had laws passed that the railroads must keep open and accessible to all the public files that they can find for themselves rates on commodities. We will admit that competent rate men are scarce, and we will admit further that we, with all of this red tape, would not be able to work out these rates on different roads; and when the railroads ask us to assign shipments over their lines and give us rates we certainly should have protection. It is just such things as this and other like treatment by large corporations that are driving the farmers from the farms and flooding the cities with good men who are lost in the whirl, and who in a great many cases become not exactly red or radicals, but feel that they have no chance with the corporations that have driven them from their homes and farms, and a great many of them become haters of our great Government."

These statements by the shippers in this case are true, and every man of intelligence knows it. Lack of courtesy on the part of railroad employees, and sometimes of higher officials, has cost the railroads practically all of the losses of the last ten or fifteen years.

Over and over again 20 or more years ago we warned the railroads of the inevitable whirlwind which they would reap from the wind which they were sowing. Some railroad officials, but not all, some railroad freight agents and ticket agents and other employees, but not all, are men of the highest courtesy. They are handicapped in their work by the lack

of courtesy of other employees. They suffer in public estimation because other employees do exactly the things that the Florida ticket agent and the Alabama freight agent did to customers, in showing a complete lack of courtesy and of any gentlemanly instinct.

If the efficient railroad employees who are men of courtesy, who are gentlemen by instinct and by act, would combine to drive out of every railroad in the country the inefficient and those who lack courtesy and gentlemanly qualities, they would render an invaluable service to themselves, to the railroads, and to the public.

ENORMOUS SHIPMENTS ABROAD OF AMERICAN CURRENCY.

THE amount of American currency being shipped out of this country is somewhat staggering, and it suggests the question of what influence it may have upon our own financial and business interests. A statement was recently made that there is \$200,000,000 of American currency in Cuba. Whether that is an over-estimate or not we do not know. But the Wall Street Journal, basing its estimate on investigations made in financial circles, says that bankers conversant with the large movement of currency from this country to Germany estimate that 500,000,000 of American dollars are in the hands of Germans, and a good part of it is hoarded.

We called attention to this movement more than a year ago and pointed out how Germans were getting hold of actual dollars or other forms of American currency, as rapidly as possible and carefully storing it away from lack of faith in their own currency. This has gone on to an increasing extent, and now the Wall Street Journal estimates that the aggregate is \$500,000,000.

If this country has parted with 500,000,000 of American dollars to Germany and a very large amount to other continental countries, and anything like the estimated \$200,000,000 said to be in Cuba, what will be the effect of the lessening of this currency upon our financial and business interests? That is a question which demands study.

TO WHICH KIND DO YOU BELONG?

MAJOR F. K. HUGER, known far and wide throughout the South as one of the upbuilders of its railroads in the early days following the Civil War and for many years thereafter, in renewing his subscription to the MANUFACTURERS RECORD writes:

"As an American and a lover of my country and the South, the MANUFACTURERS RECORD seems almost necessary to my very existence."

We would that many others in the South, who are equally as enthusiastic in their praise of the MANUFACTURERS RECORD and its work, would follow Major Huger's example and send in their subscriptions. We are sometimes a little amused by the enthusiasm of the praise which by letter and by word of mouth is expressed upon the work being done by the MANUFACTURERS RECORD by some people, who when they are asked to subscribe, say, "Oh, I read it at the club," or "I borrow it from some friend." If we could only number all of these people on our paid subscription list our presses would have to run a few more days and nights to keep up with the rush of business.

Come on, friends, if some of you feel as you say you do, and subscribe to the MANUFACTURERS RECORD and have it in your office or in your home, and don't depend upon your club or some friend for the copy which you so dearly love to read. You will appreciate it all the more if you pay something to get it. Follow the example of Major Huger, a long time subscriber, who now renews for two years.

REAL ESTATE MEN OF COUNTRY TO HOLD ANNUAL MEETING IN AUGUSTA, GA.

THE annual meeting of the National Association of Real Estate Boards will be held in Augusta, Ga., January 17th to the 19th. This will be one of the most important gatherings which has been brought together in the South for a long time, since the real estate people of the country, or the realtors as they are now called, are one of the great up-building forces of the nation.

In the building of every town and city the real estate men have always been among the leading forces for good. Here and there unreliable real estate agents have done harm, but gradually as the realtors are becoming more thoroughly organized they are practically driving out of the business irresponsible men, and are establishing for themselves in their dealings with the public a high standard of ethics.

As the realtors gather in Augusta for their annual meeting they will have a greater opportunity to study the South and to learn more of its resources and advantages than they have ever had. The local real estate people and business men generally should arrange, if possible, to see that the real estate men from the West and the North while in the South should be taken to Atlanta, Birmingham, Chattanooga and other centers of business activity; and then if possible be carried to Florida that they may see something of the conditions prevailing there.

It would be a mistake from the viewpoint of the South's welfare to have these real estate men gather from all parts of the country and then see only a limited portion of the South.

At the Augusta meeting every phase of real estate dealing as it relates to the growth of cities, the development of property values, the spread of home ownership and the safety of investment is to be discussed and comprehensive plans advanced for the betterment of all real estate activities.

The National Association of Real Estate Boards, from its Chicago office has sent out circulars announcing the plans for the Augusta meeting and covering other work of the organizations. Enthusiastic commendation of Secretary Mellon's plan for reduction of taxation is given by the Board.

It is proposed that among the subjects of discussion at Augusta will be that of Federal tax reduction, the adjustment of income taxation, the abolition of tax-exempt securities, and review of all local and state bond issues and tax levies by a state board of tax commissioners.

It is to be hoped that the meeting will not be swept off its feet by the propaganda against tax-exempt securities. This propaganda is vigorous and aggressive, and those who are in favor of passing an amendment forbidding the issuing of tax-exempt securities are unceasing in their work. Very much misinformation and false arguments have been put forth on the subject. The cry has been constantly raised that the ability to sell tax-exempt securities is encouraging wild extravagance on the part of states and municipalities.

We do not believe this. A rather careful watching of the improvements which are being made by the towns and cities of the country does not indicate that anything is being done in the building of schools, street paving, the establishment of parks, the building of water works and sewerage systems, which does not directly inure to the prosperity and progress and the health of the community. Perhaps here and there may be found a little extravagance or wildness in the expenditure of the money raised, but when throughout the country there is such a shortage of school facilities as to keep many children out of school, or give them the opportunity for only half a day's study; when these schools are often overcrowded to a point of danger to health; when dirty and muddy streets depress the value of real es-

tate and halt the progress of the community; when lack of an adequate supply of water, or inadequate sewer facilities endanger the health of a community, no wiser investment can be made than the issuing of tax-exempt securities for carrying on this work.

If the cities and states had no right to issue securities free from taxation they would have to pay a much higher rate for the money, and thus every school building, every street improvement, every water system built would be at an increased cost to the public.

The claim that tax-exempt securities are enabling the rich to shirk their responsibility for the payment of income taxes is a very narrow point of view. Equally unwise is the claim that the existence of tax-exempt securities lessens the supply of money for industrial and other business purposes. As a matter of fact, this country has absorbed during the last twelve months an enormous amount of industrial securities; but neither industrial securities nor railroad securities are so vital to the welfare of the country as the expenditures needed for municipal and street improvements. Every dollar expended in these municipal undertakings is for the betterment of the entire community without profit to individuals, whereas money expended for industrial investments is for the profit of individuals, and it should pay a higher rate of interest than the securities issued for municipal betterments.

We trust that in considering this question the real estate people of the country will realize that it would be a national disaster not only to their business, but to all other interests and to the welfare of every community in the country if a tax amendment should be adopted forbidding the issuing of tax-exempt securities.

Business men of the central South should immediately plan for inviting these realtors to visit different cities so that they may come into personal touch with the industrial and financial development now so evident in every direction.

KNOW, TELL, AND SELL THE SOUTH.

SOUND advice which can be followed profitably by every community and state in the South is given by J. S. Kuykendall, of the Kuykendall Real Estate and Insurance Co., of Winston-Salem, N. C. In writing to the MANUFACTURERS RECORD about the organization of the Triangle Industrial Corporation to promote the development of the section embracing the territory covered by Winston-Salem, Greensboro, and High Point, Mr. Kuykendall makes the following pertinent comments:

"Last night I sat up till one o'clock reading your textile number, one of the most important issues the MANUFACTURERS RECORD ever published. I know it is a great source of gratification to you to see such expressions from leading textile authorities, recognize the truthfulness, and accuracy of your preachment and predictions for the past forty years.

"I have watched the last few issues of the MANUFACTURERS RECORD with an interest which inspires action. I saw there full page advertisements from Alabama, Georgia and Florida, and numbers of smaller ones from those and other Southern states and Southern cities. North Carolina and North Carolina cities were conspicuous by their absence, with not a line in a number of issues of your great publication of progress, from either a Chamber of Commerce or any other agency in the state relative to our great developed or undeveloped resources of this great commonwealth.

"When North Carolinians know North Carolina, North Carolinians can sell North Carolina, and not until they do know it, and when the world knows North Carolina, the world will buy North Carolina.

"Every school teacher in North Carolina should be provided with a copy of the MANUFACTURERS RECORD. They should

teach it to the children in the state. Had this been done years ago, the six or seven hundred thousand North Carolinians, many of whom have become constructive forces in other states, would never have deserted the home state. An educational system (as good as it is) which does not know or recognize the trend of economic expansion, and undeveloped resources cannot adequately measure up to the full requirements in efficiency."

Mr. Kuykendall speaks plainly and to the point. For over forty-two years the MANUFACTURERS RECORD has been trying to know the South, and to tell of the advantages and resources of the South. At times it seemed the task was almost hopeless to make even Southern people realize the great resources they possessed and the opportunities they had to offer.

The work the MANUFACTURERS RECORD has been endeavoring to do in awakening the country to the possibilities of the South has not been in vain. In the beginning although it was the voice of one crying in the wilderness, men of vision caught the spirit, indifference was turned to interest, and during the past decade the interest of a few has turned into the active progressiveness of individuals and organizations found on every hand throughout the South. They are taking advantage of every opportunity to learn more of their section and of the whole South, for the broader knowledge thus gained enables them not only to tell more clearly of the South's advantages but to more efficiently and effectively conduct their own business affairs.

EUROPEAN NATIONS REPORTED AS DUMPING THEIR CRIMINALS UPON US.

CONGRESSMAN ALBERT JOHNSON, Chairman of the House Committee on Immigration, who has been making a careful study of the whole immigration question, in an address in Buffalo said that America is being made the dumping ground of Europe and Asia despite our immigration law as it now exists. "One nation," said he, "I am informed gives felons the choice of a jail sentence or an American passport. Others deport their radicals to this country."

If Congressman Johnson has the information on which to base this charge he owes it to the country to name the nations and give all the facts in connection therewith. Some years ago it was reported that one or more European countries were paying a bonus to steamship lines for bringing to this country disreputable characters or criminals, who were unloaded on us. It was thought that this had been long since abandoned, but if Congressman Johnson is rightly informed one nation at least, is still guilty of criminality equal as offensive, and perhaps more, and if it can be proven that the officials of those countries are giving to felons the choice of a jail sentence or an American passport, all immigrants of any kind from those nations should be excluded.

If other countries are shipping their radicals to us in order to rid themselves of them, the same rule should be applied and no immigrants whatever be allowed to come from them. Mr. Johnson stated that nearly 200,000 of the immigrants received have really defeated the purpose of the present immigration law, but that the law as it stands had prevented the landing of 4,000,000 immigrants who would otherwise have flocked to this country.

It is altogether probable that his estimate of 4,000,000 is within bounds, if it be possible for the steamships to have brought that number within the time limit since our present law went into effect, for all of Southern and Southeastern Europe seem to have been eager to come to this country. The situation, viewed from every standpoint, demands a more drastic immigration law than we now have. The indescribable criminality which centers in the foreign population in New York, and from there radiates to the entire country and to all classes, is so alarming that it should demand the most

serious study of every well-wisher of this country. New York has ceased to be an American city except in part. With 76 per cent of its population born abroad, or born of foreign parents, it seems to have become the very center of the criminality of the world; and immigrants, especially those from Southern Europe, poured into that city in still larger numbers would only serve to intensify the present danger.

We cannot conceive how thoughtful, patriotic Americans, regardless of any scarcity of labor which they may find for their own plants, should be willing to see more of this foreign element dumped into our country. Surely our great employers of labor have more patriotism than to be willing to increase their labor supply at the expense of the nation's future.

Part of this demand for increased foreign immigration comes from some who think that an increased supply of foreign labor would break down the price of the labor market in this country. That is an unfair, unpatriotic position. Foreign labor should never be used under any condition whatsoever as a club over the workmen of this country. Far better would it be for us to make less material progress, to produce less iron and steel, and other manufactured goods, than to increase the output of these things at the cost of the maintenance of our labor situation, and ultimately the maintenance of our Government itself. Probably most of the agitation for more immigration is inspired by the steamship lines which are eager to regain their former big immigration traffic.

We cannot stress too strongly the tremendous danger which faces this nation from the violation of law. Murderers run rampant throughout the country. Crime of every kind sweeps over the land. Many men who profess to be patriotic citizens, men of affairs who should uphold our laws to the very extreme for the safety of themselves and the property interests of this country, if for no higher motive, disregard our laws and fail to obey any which are contrary to their views as to what laws we should have.

Obedience to law is the supreme test of our right as a nation to live. Over the entrance to the courthouse at Worcester, Mass., is the statement: "Obedience to law is liberty." To this might be added: "Disobedience to law inevitably breeds anarchy."

Let us beware of bringing into this country any more people of the anarchistic spirit bred in much of Europe for a thousand years—yes, even for two thousand years or more—and which cannot possibly be eliminated merely by transferring them to this country. It has been well said that you cannot change a common plow horse into a high-bred race horse merely by putting him in the stall built for a race horse. Neither can you change human nature, bred through two thousand years in Southern and Southeastern Europe, by bringing these people, alien in thought, in language and in recognition of law, into this country. Our salvation as a nation, our ability to serve the world and lift up mankind by our example would be utterly destroyed by permitting a continued influx of this foreign element, whereas by closing our gates to any further increase of immigration than we now have under existing law—and that is not sufficiently drastic—our own government can be maintained, perhaps, and stand as a beacon light for all the world, leading the nations gradually upward to higher things.

The demand which has been made by some of the organizations of the country for letting down the bars against immigration and permitting a larger inflow of foreign population, viewed from the standpoint of the nation's welfare and of the world's welfare, is shortsighted and selfish to the extreme. We trust that the employers of the country, whether they be manufacturers who may be needing more labor, or contractors and all others who want to a larger labor supply, will put aside their own selfish interests and stand unyielding against increased immigration.

PUBLIC SENTIMENT CAN UPBUILD OR DESTROY.

THROUGHOUT the country there is an awakening realization of the fact that public service corporations, and, for that matter, many other corporations, have brought upon themselves great discredit at times by not cultivating public sentiment. It was the custom in former years for railroads and street railways and many other public and semi-public corporations, and for some of the big business corporations to ignore absolutely public sentiment and think that they need not discuss their affairs with the public.

Fortunately a new view is coming to many of these interests and they appreciate the fact that public sentiment in this country will sooner or later control all semi-public or public service corporations for weal or for woe to the corporations and the public alike, according to the way in which these corporations deal with the public and with public sentiment.

In a discussion of some phases of this situation Preston S. Arkwright, president of the Georgia Railway & Power Company, and chairman of the Public Relations Committee of the Southeastern Division of the National Electric Light Association, urged delegates at the recent convention at Tampa to increase their advertising to at least 1 per cent of the gross revenue of their companies.

Mr. Arkwright stated that public utilities had an investment of more than \$16,000,000,000 to protect, and that they did an annual business of more than \$3,000,000,000, and they needed the good will of more than 33,000,000 customers. He might, however, have added that they needed the good will of the 110,000,000 people in this country, whether they are direct customers or not. In further discussing the subject he said:

"Inquiries made by our committee show that the average amount of the gross revenue being spent for advertising purposes and public relations work by utilities companies in the South averages around one-fifth of one per cent.

"Taking into consideration the amount spent by all the companies in the United States, this average is about one-fourth of one per cent.

"This percentage is ridiculously low, when compared with the amounts spent by other business enterprises for the purpose of securing the attention and good-will of the public. The minimum gross allowed in the business world is two per cent, and the amount allowed for advertising purposes frequently runs as high as seven or eight per cent.

"This committee would recommend that at least one per cent of the gross revenue of a public utilities company be devoted to advertising, preferably newspaper advertising, and to the development of a public relations service."

Other recommendations made by Mr. Arkwright were the following:

"That wherever possible, public utilities should maintain a public relations department to promote good will between them and their patrons.

"That cooperation between the individual companies and state commissions on public utilities be encouraged.

"That steps be taken to secure closer cooperation between manufacturers and jobbers and the central stations.

"That public speaking and safety work be encouraged in every way possible, every effort being made to put public utility problems before the children.

"That more attention be paid to the relations between employees and the public, and that employees be kept fully informed as to the problems of the company through the department heads, employees' meetings, or company publications."

The facts presented by Mr. Arkwright cannot be too often or too strongly emphasized by the managers of public utilities or public service corporations. Railroads would never have had their disastrous experience of the last ten years if they had not ignored public sentiment 20 or 25 years ago and practically sought to control legislation, not by giving the public the actual facts as to their operations, but by manipulating legislative action. The men of that day are responsible for the condition of railroads during the last ten or twelve years. Some railroad people are still as narrow minded as were those of the olden days, but fortunately a new spirit is abroad among the men of today to a large extent.

It is necessary for corporations, and big business concerns interested in dealing with the public, as well as railroads and public service corporations generally, to recognize that the public has a right to know all about their operations, and if the facts are not given them fairly and frankly and freely, the public will reach erroneous conclusions and will break down by reason of ignorance the things which they would have upbuilt by their sympathy and cooperation, if they had been rightly informed.

We congratulate Mr. Arkwright upon stating the case so strongly.

COTTON CROP ESTIMATED AT 10,081,000 BALES.

THE Crop Reporting Board of the Agricultural Department estimates that the total production of cotton in the United States for 1923-24 will amount to 4,821,333,000 pounds (not including linters), equivalent to 10,081,000 bales of 500 pounds, gross weight (478.3 pounds lint and 21.7 pounds bagging and ties estimated per 500-pound gross-weight bale.)

Total cotton ginned for the crop of 1922 was 9,761,817 bales for 1921, 7,953,641 bales; and for 1920, 13,439,603 bales. The average production for the five years 1910 to 1914 was 14,259,231 bales, and for 1915 to 1919 the average was 11,481,084 bales.

The reports of the Crop Reporting Board do not include "linters," which are a product obtained at mills from the seed. The production of "linters" is about 6.2 per cent as much as the lint production; (average 1917-1921).

The price per pound of lint cotton to producers December 1, 1923, was 31.0 cents, compared with a December 1 price of 23.8 cents in 1922, 16.2 cents in 1921, 13.9 cents in 1920, 35.6 cents in 1919, 27.6 cents in 1918, 27.7 cents in 1917, and 19.6 cents in 1916.

The estimated production of lint cotton in 1923, with comparisons, by states, follows:

State	Bales of 500 pounds, gross weight			Farm price Per pound	
	1923	Census ginning		Dec. 1	
		1922	5-yr. av. 1917-1921	1923	1922
				Cents	Cents
Virginia	50,000	26,515	20,778	32.0	23.0
North Carolina	1,020,000	851,640	809,405	30.8	24.5
South Carolina	795,000	492,535	1,322,114	32.0	24.3
Georgia	590,000	714,998	1,573,612	32.0	23.9
Florida	12,000	25,021	22,443	28.8	23.0
Alabama	600,000	823,498	654,934	31.8	24.0
Mississippi	615,000	989,273	960,163	32.5	24.1
Louisiana	365,000	343,274	438,130	30.3	24.0
Texas	4,290,000	3,221,891	3,092,869	30.4	23.5
Arkansas	620,000	1,011,457	971,390	31.9	23.6
Tennessee	220,000	390,994	301,460	32.0	24.5
Missouri	115,000	149,000	67,162	32.5	21.5
Oklahoma	620,000	627,419	873,936	29.6	23.0
California	49,000	128,243	58,115	32.0	26.0
Arizona	83,000	46,749	57,127	34.0	30.0
All others†	37,000	19,310	7,745	31.0	25.0
U. S. Total	10,081,000	9,761,817	11,231,383	31.0	23.8

*About 86,000 bales additional being grown in Lower California (Old Mexico).

†Includes about 7,000 bales of the 58,000 bales grown in Lower California (Old Mexico).

‡Including New Mexico.

THE SOUTH AND THE NEGRO.

COLLIER'S WEEKLY recently contained an article by Mr. W. O. Saunders giving his reason as to why so many negroes have been moving to the North. Mr. Saunders opens his article with the following statement: "I am a Southern white man, born and raised in an old-fashioned Southern country town where the population was, about half black and half white. I have lived nearly all my life in the South and close to colored people. When I was a child I loved my 'ole black mammy' and played with negro children without prejudice. But I grew up to dislike negroes generally, just as almost everybody in the South does, for no particular reason at all except that 'a nigger is a nigger.' I came to manhood with a Southerner's dislike and contempt for black folks."

The MANUFACTURERS RECORD knows no language that would fitly answer these statements. There are, indeed, a certain class of people in the South, as those known by the negroes of old times as "poor white trash," who hate the negro. They will hobnob with him and drink with him, at times, and place themselves on a social par with him, although the negro is really far above that class, and then they will as occasion offers fight the negro, or sometimes shoot him. But these people no more represent the real people or the real sentiment of the South than the vilest black criminal represents the real negro element of the South.

The true Southern people appreciate the negro, and are doing their best to benefit him financially, morally and spiritually. They do not hate the negro, they do not regard him as a "nigger." They regard him as a fellow being doing his appointed work and they do not hold the race responsible for the criminals in it any more than the decent whites of the South should be held responsible for the criminality of its criminal classes, or for the effort to misrepresent the relations of the better class of the Southern whites and the better class of the negro.

Collier's Weekly introduces the article by Mr. Saunders with the editorial statement: "A Southern white man, reared with a Southerner's aversion to the black man." Now the Southern white man has no aversion to the black man per se. The aversion of the average Northern man to the negro is far and away greater than that of the Southern man. The Southerner understands the negro. He appreciates him, he knows his failings, he knows his good qualities, he knows that the race as a whole is a child race, in mental development, and must to a large extent be treated as children. But he knows that inherently the negro race has great possibilities for work and for spiritual and moral advancement, whereas, the average Northern man knows so little of the negro that he misunderstands him, mistreats him and hates him if in close contact.

A minister from the North accepted a call, some years ago, to a Baltimore church. He said to the writer one day that he never sat in a hotel dining room and was served by a negro waiter that he did not shiver every time a negro came near him. He had an aversion to the whole negro race whenever one of them approached him. No Southern man ever feels that way. A Colorado man, after a visit to the South, stopped at Baltimore and said: "I cannot possibly imagine how you people in the South can ever be satisfied with the negro's presence there."

Both of these men, and they are typical of the majority of the Northern and Western people, neither understand nor appreciate the negro. The South understands the negroes and appreciates them.

But the writer of the Collier's Weekly article shows that he is not of that class of Southern people who do appreciate the negro and who are, to the utmost of their ability, striv-

ing to advance him morally and spiritually. They have no such aversion to negroes as Mr. Saunders admits that he has and the very fact that he makes his admission shows that he is wholly unfitted to discuss the question as it relates to the South and to the North.

Mr. D. L. Bingham, vice president of the Bank of Indianola, Miss., writes the MANUFACTURERS RECORD calling attention to the article in Collier's, and referring to the misinformation it contains, says:

"But when the writer qualifies as an expert and makes the statement 'I grew up to dislike negroes generally, just as almost everybody in the South does,' too much is enough, and I can only pray: Good Lord, deliver us from such friends!"

RAILROAD NECESSITIES AS VIEWED BY A LEADING MANUFACTURER.

The American Rolling Mill Co.

Middletown, Ohio, December 1.

Editor Manufacturers Record:

As I see it, our railroads are now surrounded by a perfect cordon of rules and restrictions. Regulation and supervision is certainly personified in their case.

In spite of all this and of the enormous task of reorganization and rehabilitation which they had to work out after the Government returned the roads to their rightful owners—their stockholders, they have within a very short time succeeded in obtaining a degree of efficiency and a quality of service beyond all expectation.

It was a Herculean task, only possible of accomplishment through the application of such splendid executive ability as is usually found in the management of our railroads.

As I understand it, all they now ask is to be left alone, under the drastic plan of regulation and restriction now in force, for long enough to see just what they can do under the laws now governing their operations and limiting their earnings.

The problems of financing, of organization, of operation and of providing adequate service for our growing agricultural, commercial and industrial activities must be co-ordinated, and it cannot be done if the restrictions and regulations under which they must work are constantly changing.

They must have opportunity to work under some one plan for long enough to thoroughly try it out.

In their enthusiasm over the whole problem of control of our systems of transportation, many persons seem to proceed on the assumption that our railroads are a great Gibraltar like the United States itself that can withstand any sort of treatment, whether it be economically, practically, or righteously sound or not. They overlook the fact that efficient transportation is absolutely essential to all business activity, to further national development, and to the maintenance of substantial industrial activity, which is the foundation of the problem of employment.

When the railroads are financially able to keep up their current purchases covering maintenance and new equipment, they are one of the country's largest purchasers of manufactured products which assures employment at a rate that will support good wages.

It would certainly seem as though the railroads should have at least five years of undisturbed opportunity to work out their problems.

GEO. M. VERITY, President.

JUDGE CRUM'S CHARGE TO A GEORGIA GRAND JURY.

THE address of Judge Crum of Georgia to the grand jury, published in full in this paper on November 22, has attracted very wide attention throughout the country. It has been editorially commended by many leading newspapers, and the way in which it has been received by our

readers is indicated in a letter from Thomas M. Ferguson, a real estate operator of Hattiesburg, Miss., who writes:

"We get a great many good things out of your wonderful magazine, but I believe you gave us 'the cream of the pot' when you reproduced Judge Crum's address to the grand jury in your RECORD of November 22.

"I am writing to know if you have this in pamphlet form. If so what will a thousand copies cost, as I want to place one in the hands of every judge in the state as well as in every high school and agricultural school in the state."

THE WORLD COTTON FAMINE AHEAD OF US.

IN a letter to the MANUFACTURERS RECORD about the cotton situation, President J. S. Wannamaker, of the American Cotton Association, writes:

"Referring to the supplies of cotton, even were it possible to increase production 500,000 bales, it would fail to avert the cotton famine with which we are confronted. It is conceded by very reputable students of the cotton industry that there will be a shortage of supplies of American cotton at the end of the present cotton year of 2,500,000 bales and there will be a shortage of world supplies of cotton of all kinds of 5,000,000 bales, based upon present consumption. English mills have provided for their wants to a far greater extent than the American mills." [And Mr. Wannamaker might also have said German mills, which bought freely when cotton was about 22 cents a pound.] "The American mills were misled by inexcusable, erroneous Government reports and failed to cover their wants; hence, the American mills will suffer to a far greater extent from the famine than the English mills. It is conceded it will be necessary for the mills to go on short time four months before the next cotton crop can reach the market.

"Cotton bales are being ginned extra light this year due to the great shortage of the crop; in addition to this, on account of the premature opening and damage from the boll weevil, cotton is linting out extremely short from the seed, so that the trade is being misled by the number of bales being shown as ginned. They overlook the fact that these bales are record-breaking light and when you reduce them to commercial bales of 500 pounds it will make a material change in the number of bales. However, regardless of this the world is facing a cotton famine which cannot be averted by erroneous quotations and manipulations of the market or through any other source. The legitimate law of supply and demand is bound to function eventually, and if conditions were anything like normal in Europe it is hard to say to what price cotton would go.

"You are familiar with conditions during the cotton famine of '64 and '65. In my childhood days I have often heard my parents deplore the fact that they sold cotton just after the close of the war at 72 cents per pound, and only a few months after cotton sold for \$1.92 per pound, and had they postponed selling for a few months, it would have resulted in enabling them to save property which went under the hammer as a result of their inability to raise sufficient finances to save it during those distressing times.

"Of course, it will be absolutely impossible to have such a spread in prices of cotton now, but the law of supply and demand is bound to play an important part in prices, regardless of conditions referred to abroad. And then in face of this, should we have adverse seasons during the coming spring, you can readily understand the effect it would have upon the cotton consuming world. It will bring them face to face with the fact that it is not only necessary to meet cotton shortage, but to meet conditions that have never con-

fronted the cotton consuming world in the last century, and that another short crop spells the certainty of the closing down of manufacturing establishments worldwide and an absolutely insufficient supply of cotton to fill the present necessary needs of the consuming world."

Mr. Wannamaker's views are in exact harmony with the predictions of the MANUFACTURERS RECORD for more than a year past.

A MISLEADING NAME.

WHEN the Secretary of the "Bureau of Raw Materials" of Washington denounced the efforts of the Southern Tariff Congress to have an ample protective tariff on the vegetable oils and seeds of the South, he showed by the animosity displayed and the abuse which he tried to heap upon the Tariff Congress that he had no arguments, but only sought by abuse to muddy the waters and mislead the public.

Many people, and even some newspapers, which should have been better informed, were led to believe that the "Bureau of Raw Materials" is a governmental institution in Washington. The title is misleading. The bureau has no connection whatever with official life of Washington; other than it is a fact that it is a bureau established by the soap-makers and other users of these raw materials produced on Southern farms, who are seeking to break down the tariff in order that they may buy their vegetable oils and seeds at a lower price.

We do not know whether the name, "Bureau of Raw Materials" was selected for the express purpose of deceiving the public or not, but it has certainly been instrumental in misleading many. The newspapers of the South, some of which were misled into heading their announcement of the secretary's attack on the Tariff Congress with a statement that a Government Bureau was opposing the Tariff Congress, ought to have known that this organization has nothing whatever to do with the Government, but is purely a selfish organization having for its object the destruction of the tariff on the seed and vegetable oil industries of the South that it may buy for the great soap-makers and other interests of that kind, foreign stuff more cheaply than it can buy home producer's stuff.

Though these people almost wholly depend upon the American market for consuming their goods they are using their utmost efforts to break down the profits of the farmer who produces the raw materials. Against such interests everybody in the South should unceasingly protest.

HOW THE FORD-MUSCLE SHOALS OFFER LOOKS TO A LEADING PAPER.

These reports, whether they represent Mr. Coolidge's mind or not, are most discouraging for they indicate that Washington newspaperdom, in spite of its exceptional intelligence, does not understand the Muscle Shoals situation or the Ford offer. The gist of the reports is that the President is now contemplating the construction of a steam plant at Florence so that Muscle Shoals may be made sufficiently attractive to make Henry Ford forget his ill temper at the sale of Gorgas to the Alabama Power Co. and renew his offer for Muscle Shoals. This is pure Ford propaganda. Those who have followed the case know that the one or two million dollars involved in a steam plant is a drop in the bucket compared to the perpetual franchise Ford is asking the government to give him in violation of the water power law of the country. To present the government in the role of a suppliant to Henry Ford is ridiculous.—*Engineering News Record*.

"To give him," just about states the case, and Mr. Ford is hardly in need of a fat gift of the people's property by Congress. Let Mr. Ford make a fairly decent offer for Muscle Shoals if he really means business.

Englands' Peril as Seen by an Englishman.

By ARTHUR KITSON, a Leading Manufacturer of England and President of the British Banking Reform League.

At no period of her history during the last century has England been in greater danger than she is at the present time.

Although we emerged victors in the Great War, it is safe to say that economically speaking, England is probably in as bad a condition as though Germany had succeeded.

Trade and industry are stagnating! We have over two millions of unemployed, which means that from eight millions to ten millions of the population are on the verge of starvation!

Thousands of our merchants, manufacturers and farmers have become bankrupt. Agriculture has never been in so precarious a condition as at the present time.

There is a feeling bordering on despair throughout the land, and our politicians are almost beside themselves with anxiety. The burden of taxation has become unbearable, and it is questionable whether the next Chancellor of the Exchequer will be able to balance his budget out of taxation.

We are the most heavily taxed country in the world. One industry after another is falling into decay, and there are English towns that are on the verge of total collapse. All this can be traced directly to the disastrous policy pursued by Mr. Lloyd George and his Coalition Government during his period of office.

The main cause of all this trouble, however, was the action of the Treasury Department and of the Bank of England in deflating the currency. The mere announcement of this policy in the House of Commons in March 1920 by Mr. Austen Chamberlain who was then Chancellor of the Exchequer, was sufficient to cause a slowing down of the industrial machinery. This fatal policy of cutting down the purchasing power of the people has been continued until two or three months ago, and it has brought disaster and ruin throughout the whole country.

Finally, in sheer despair, Mr. Baldwin—the present Prime Minister—recently announced that he had determined to introduce protection to British industries, with the hope that this would tend to arrest the ruin which stares the country in the face, and it is on this issue that he has boldly challenged the Free Traders and gone to the country with the hope of re-election.

There are three political parties in the field, Liberal, Labour and Conservative. The Liberal party stick to their old exploded fallacies which did duty in 1840, but which have become obsolete during the past 30 or 40 years.

The Labour Party is also openly for free trade. It has no remedy for unemployment except to transfer the ownership of industries to the State, a measure which would, if attempted, create a revolution.

The Conservative Party, of which Mr. Baldwin is the head, is the only party which offers any direct proposal for remedying the trouble.

As to the results of the election, no one can predict with any degree of certainty. Personally, I believe Mr. Baldwin will win. The uncertain element, however, is Labour.

Mr. Baldwin has promised that he will not put any duty upon food imports. This is to meet the clamour against dear food.

Agriculture is to be protected by a bonus paid by the government of one pound per acre per year upon all arable land under cultivation conditionally that the farmers pay their agricultural labourers a minimum of 30 shillings per week. Already the farmers have stated that this is of no use to

them and that at least 2 pounds per acre will be necessary to keep things going.

Altogether the outlook is not very rosy. In any case, a Tariff Bill would be of a very mild description. Nothing drastic would be attempted. Probably a 10 per cent duty would be as much as they would attempt as a commencement.

The British public, however, are beginning to realize the value of their home markets, and that under the best of conditions, foreign trade is a poor substitute for the loss of their local markets.

It will have been noticed that the Prime Minister recently referred to the subject of deflation and promised that this policy should cease, and the Minister of Labour even went so far as to promise a measure of currency inflation.

It may interest your readers to know that the Prime Minister's action has been indirectly the result of the propaganda of the British Banking Reform League, of which I am president. After some years of active work, we have finally convinced some of our statesmen that the unemployment has been mainly due to the deflation policy.

I may add that the interest that has been taken also by the Federation of British Industries in this subject has also been the work of the members of the Banking Reform League.

The predictions which we made as far back as 1918 as to the results of currency deflation and which appeared in my evidence before the Cunliffe Currency Committee in 1919, have been fulfilled.

The conditions here are a complete vindication of the attitude which the MANUFACTURERS RECORD assumed on this question, and also of that of the Banking Reform League, in this country.

It is quite certain that a continuation of the deflation policy for another twelve months would end in the bankruptcy of this country.

Both Free Trade and the Gold Standard are condemned by experience. They have wrought havoc and ruin. They belong to the past. Economics is a progressive science and the policies which may succeed in one period of a nation's existence would be fatal at another period.

Earl Balfour summed up this question in the following words: "I would as soon entrust my health to a doctor whose knowledge of the pharmacopoeia was that of 1840 as I would entrust our national trade and financial policies to men who have learned nothing since the days of Richard Cobden and Sir Robert Peel."

Stamford, Lines. November 27.

Chimney Rock Development Progressing.

Chimney Rock, N. C., December 15—[Special]—Dr. L. B. Morse, of Chimney Rock Mountain, Inc., hopes to start construction work this spring on the dam of the proposed development. It will be between 90 and 100 feet high and 600 feet long, giving a power capacity of about 2000 horsepower. Dr. Morse reports local people are manifesting deep interest in this new resort and power project which was recently mentioned in the MANUFACTURERS RECORD.

Plans are being carried forward progressively, he states, in handling the details of purchase of lands. The project calls for a lake covering 7246 acres and having a shore line of 24 miles, high up in the mountains. The land surrounding the lake is to be subdivided into building lots and hotel sites.

America Not Tricked by German Dye Trust Methods.

UNITED STATES DETERMINED TO HAVE AN ORGANIZED CHEMICAL INDUSTRY—NEEDED IN WAR AND PEACE—PROTECTIVE TARIFF ESSENTIAL—DR. HERTY RE-ELECTED PRESIDENT OF ASSOCIATION.

[Special Correspondence Manufacturers Record.]

New York, December 14.

A plan of infiltration by which the German dye trust hoped to gain control of the American chemical industry and once more resume its lost world-monopoly was revealed here today by Francis P. Garvan, president of the Chemical Foundation, Inc., speaking before the annual meeting of the Synthetic Organic Chemical Manufacturers Association.

The Germans, Mr. Garvan said, have never for a moment lost the hope of strangling the war-born chemical industry in this country, and for some months past, the dye trust there has been dividing into a number of companies with the idea of having each seek an alliance with a strong company in this country, the result being a gradual absorption of American concerns.

That this plan had met with little or no success was the belief expressed by Mr. Garvan, who said the chemical and dye makers of America realized too well their part in national defense to be tricked by any such German methods.

The next move that might be expected, he said, would be the attempted establishment in this country of an independent German industry, but this he was confident would result in failure. He said one of the most encouraging features of the present outlook was the ever-increasing investment in chemical education and laboratories by schools and colleges in all parts of the country.

"The United States is determined," Mr. Garvan said, "to have an organized chemical industry of her own so her children and her children's children will be safe. That was the plea with which you went to the last and to the present administration, and we expect it to be lived up to."

That the organic chemical industry is both a key and pivotal one was the statement of Col. J. I. McMullen, of the Judge Advocate General's office of the War Department. Col. McMullen declared that a well-balanced chemical industry was absolutely necessary for our national defense, and that the lack of such an industry would be a serious menace to our national existence.

He said there were two menaces to the chemical industry at present, the present tariff and patent laws. He declared a tariff wall to protect chemical and dye makers was absolutely essential, and protested against "the dumping of foreign goods of any character deleterious to our own industries."

Few persons, in considering the chemical industry, Col. McMullen said, "realized that the word 'dye' was practically synonymous with 'explosive,' and without a well-developed, completely Americanized dye industry, this country would be greatly handicapped, if not completely crippled in national defense."

In speaking of the necessity for tariff protection, Col. McMullen said:

"New industries, including your own, which have grown up in this country to supply goods formerly imported from Europe were well-protected during the war, and should continue to be protected. It must be remembered that because of the longer experience in some of these special arts, the foreigner has an advantage. Their well-known willingness to make temporary sacrifices in order to crush their young competitors, makes necessary a constant scrutiny of their business methods."

In regard to the patents situation Col. McMullen urged the

necessity for laws making it possible for the United States government to require production under patents filed in this country, which he said was done by other governments. This was necessary, he explained, so that in times of war or other emergencies, plants might exist for the manufacture of products necessary to the life and defense of the nation.

A letter was read from Elon H. Hooker, president of the Manufacturing Chemists Society, in which he declared that the United States, having just fought a war had dropped her arms "as the shiftless farmer does his machinery, to rust and decay in the field, showing aversion even to retaining a nucleus of defense." He condemned the destruction of Nitro-W. Va., and said that other nations were "keeping their necessary arms burnished and their scientific intelligence keenly alert."

Daniel F. Waters, president of the Master Dyers' Association, declared that the United States is independent in the matter of dye-making, lacking only a few colors such as hydrogen pink and golden orange. He said that new colors were coming on the market every week, and that there was no reason for failure to meet foreign competition.

Dr. Charles H. Herty, president of the Synthetic Manufacturers Association, said the Germany dye industry was in a crucial condition because of the French occupation of the Ruhr where most of the plants are situated. He said an agreement had been entered into for the temporary operation of these plants, and that the next few months should show American manufacturers what they might have to fear from German competition.

Dr. Herty was re-elected president of the Association, and Dr. F. T. Summers vice-president. The following were named vice-presidents: August Merz, heading the Dyestuffs Section; F. W. Wilder, Crude and Intermediate Section; G. F. Richmond, Fine Organic and Medical Section; and P. S. Rigney, Special Chemistry Section.

Foundation Contract Let for University Buildings.

Memphis, Tenn.—Contracts for building foundations for five proposed buildings here for the Southwestern Presbyterian University have been awarded to the Foster-Creighton Co., of Nashville. This company was also awarded a contract for extensive grading on the campus and for the construction of two roadways through the grounds. It is stated that contracts for the buildings proper have been delayed pending changes to be made in the plans. The structures will be of reinforced concrete and rubble stone. Henry C. Hibbs, of Nashville, is the architect, and S. W. McGill is the chairman of the building committee.

May Build Two Big Dams on Rappahannock.

Press reports state that plans are being considered by the Spottsylvania Power Co. of Fredericksburg, Va., for the construction of two big dams on the Rappahannock River, above the company's present power house and dam. These dams, it is said, will increase the company's output of electrical energy from 5200 horsepower, the capacity of its present plant, to 30,000 horsepower, much of which will be carried to Richmond over high tension lines.

The company advises the MANUFACTURERS RECORD it is not yet in a position to supply information about the proposed development.

The Romance of Southern Pine.

No. 2—WHO WANTS A HERD OF BUFFALOES?

By EARL DIONNE, Elizabeth, La.

"They're gone from the earth" wailed the sentimentalist, "all those shaggy monarchs whose hoofs stirred the dust on a thousand miles of prairies—destroyed by man, the buffalo has disappeared."

"And why not," snapped his hard-headed friend. "What good were they roaming the prairies? We have cattle on the prairies now, and corn and wheat and hogs, things better to look at and much more cashable. If we had those buffaloes, where would we pasture them?"

"Who wants a herd of buffaloes anyhow?"

Southern pine lies a glorious carpet across the South—that is it did lie—you know how carpets wear out.

Roughly, Missouri, Kentucky and the Virginias form its north line. The plains of Oklahoma and Texas stop it on the west, and the Atlantic and the Gulf of Mexico are its other outposts.

Long leaf pine is the border on the carpet. It lies in a slim belt south of a line drawn roughly from half way up the Texas eastern border through Jackson, Mississippi, through Atlanta, Georgia, and on east to the coast. It stops from fifty to one hundred miles from the Gulf Coast, depending on the topography of the country, as long leaf does not like to get its feet wet.

Many things have happened to the carpet of timber for the past hundred or two years. The old place doesn't look the same. You and I, mother and dad, have been building airplane bungalows and hen houses and factories and we just naturally have worn this big carpet out.

It didn't wear out the same all over either, the real hard wear coming in the last twenty years or so. Up to that time the logging was done by teams—ox, mule and horse. The best of the timber only was cut down, the smaller stuff left, mainly because you and I weren't paying much for our lumber and the lumber guy did not waste much time on trees that cost more to handle than they would bring in the market.

Then you and I started building more, we had to have more lumber, and the lumberman always a gentleman, accommodated us by spreading out into new country, by building bigger and better mills, and by cutting all the trees as he went.

Competition got strong, flesh and blood could not stand the pace, and steam came into the woods. Steam is powerful, it is economical, but it is merciless.

Up in the woods of the north, for generations men have gathered about the bunk house stove at night and told each other wondrous tales of the master-logger, Paul Bunion. (Some folks spell this name "Bunyan," but as Paul was a brother-in-law of Pete Heel there is bound to be a relationship also in the spelling of their names.)

Paul was the top-notch of the woods. His camps were the biggest, his men were the mightiest, his trees were the tallest, he was the strongest, and he logged accordingly.

When Paul had the job of logging off all that country where the Dakotas, Nebraska, and all those bald faced states are now, he took his big blue ox, Babe, and hooked him to a section of timber at a time and hauled the whole section to the skidway at one pull. When Babe got through with a tract of timber you had to carry your firewood. For witness see that country today.

The "Babe" of the Southern woods today is the steam skidder. When the modern logging crew takes up its tracks there is mighty little left standing.

The sheer fight for existence, the absolute necessity for a

logging method that would allow a margin of profit forced the lumberman to steam, and to destruction of the small timber.

He knew no choice and he recognized but one master—Old Man Necessity.

Caesar had his Brutus, Charles the Second had his Cromwell, and the pine tree has the steam skidder.

And, as they claim now Patrick Henry never did say, if this be treason—what would you, Oswald, have done in the lumberman's place?

Anyway, blame the lumberman for destructive logging or not, today the forestry sharps tell us that we have in the South twenty-three million acres of pine left out of an original one hundred thirteen million acres.

They tell us AND WE KNOW that in ten years or so we will be buying our lumber from the Pacific Coast, or from Mexico, or some other high freight rate place, if we do not grow some timber on the ninety million acres of cut over.

All right, folks, here we are—

Who wants a herd of buffaloes?

Who wants to carry the water and furnish the feed and rub them down and put them in their little dusty beds each night for the next forty or fifty years? What will the proud proprietor get out of it in that forty or fifty years?

Why, gents, he will be like the fellow who got all inspired during the war for producing food and who bought five pigs for fifty dollars. Six months later he was proudly telling a friend about it.

"Just sold my pigs for \$150," he said.

"Fine," says his pal, "how much did it cost you to feed them?"

"Why, I bought \$100 worth of feed, but I had the use of the hogs for six months."

The party who reforests has mostly for his trouble the use of the forest for forty years. He can ride through it and admire it and keep fires and razor back hogs out of it, and he can pay taxes on it and pay the interest on his money every year.

Does that appeal to you hard-headed men of business who want your ten or twenty per cent a year and who want it in an absolutely bomb proof security?

What'd y' say?

Well, so does the lumberman.

Many people, friends, have been wishing for the privilege of reforesting the South for many years, the people at large wish the lumberman had it and the lumberman most earnestly wishes the people at large had it.

Here are the buffaloes, folks, looking wistfully at us.

They will average 1200 pounds on the hoof, and they ought to increase thirty per cent a year, that's about what range cattle are expected to do. That's going to be a lot of buffaloes.

Oh, no, there's no guarantee they will increase that much, the wolves are pretty bad, and the colic takes 'em, and some fellow who doesn't know you own 'em may shoot them up some; so we don't know just how big that herd will be in forty years.

What price'll they bring?

Well, that's kind of uncertain too. If there's a right pert demand for buffaloes forty years from now, and the hoof evil takes off all the cattle and nobody else goes to raising buffaloes you ought to get a right good price for them.

The trouble is that nobody's ever raised any buffaloes so it's pretty hard to tell what luck you'll have.

What? You don't want any buffaloes?

Well this is true, that somebody, and that right soon is going to have to raise those timber buffaloes.

We can get along without regular Buffalo Bill buffaloes, cow steaks still tasting right well, thank you, but we cannot raise any substitute for wood. Concrete will do in spots, and Indians used to live in houses built of hides, and there are some mud winter and summer homes among certain classes of aborigines, but on the whole lumber, good-old-reliable-easily-sawed-and-easily-fitted lumber, is a necessity of our life.

The only mistake Paul Bunion ever made was the winter he logged off a lot of timber in a strange country and put it on the river bank. Spring came and he tumbled his logs into the stream and started them down the current. He drove these logs for two or three weeks, hoping to come to the mills, and the first thing he knew he was driving right past the place where he had put the logs in the river. He was on the famous Round River and the tale of the Round River drive is now every day talk in the logging camps.

Up to now in this reforestation talk, we have been most decidedly on Round River, and it's time we started driving a stream that goes somewhere.

We do not know how much timber we can grow on an acre in a given number of years, though we of course have ideas; nor do we know what the price will be at any given time in the future; but the lumberman knows what it will cost to carry that tract year by year and because he knows is the reason he is "laying off" of it.

Here is a good estimate of costs put forth by a lumberman who has been experimenting at his own expense for fifteen years:

He takes an example of a 50,000 acre tract, values it at \$3 an acre; charges interest at 8 per cent; charges taxes at 2½ per cent on valuation which is 7½ cents an acre a year; charges cost of supervision at 7½ cents an acre a year.

He states that the investment in twenty years would be \$1,000,000 or \$20 an acre.

In short if you buy cut-over land today at \$3 an acre, during twenty years you will have the privilege of spending \$17 additional on every acre.

At the end of forty years, according to this authority, the timber will be large enough to operate and the cost will be \$80 an acre or \$4,000,000.

It will cut then, he said, 15,000 feet to the acre.

The cost of that timber therefore, after you have taken care of it for forty years, is over \$5 a thousand feet, to which you can add a severance tax of 10 per cent of cutting value. This expert predicts a value of \$10 a thousand feet, which seems fair enough, and with \$1 a thousand added for severance tax to the original \$5 growing cost, we have a total cost of \$6 per thousand feet, with a profit therefore of \$4 per thousand feet.

Therefore for every \$6 spent you will get \$4 profit, or 66½ per cent.

Fine.

Only this profit is spread out over forty years which leaves less than 2 per cent a year.

Yes, not so good.

The profit can be added to by cattle grazing (though there are cattle owners that dispute the word profit in connection with their business today), and also after twenty years or so, by selling inferior trees and trees growing too thickly as wood.

But on the other hand to get this 15,000 feet of timber in forty years it is necessary to leave seed trees after the logging operations, so there will be natural re-seeding. However this can easily be done, even though it is not done as a rule.

But wait a minute, there is a decided discrepancy regarding the cost of supervision, which means principally fire control. Another expert writing in a recent issue of American

Forestry says that fire protection on a large scale will cost probably 25 cents an acre. Our first expert, recall, rates his supervision at 7½ cents.

Then there's the piney woods hog. He likes the roots and where he flourishes small pine does not.

And there's lightning.

And insects.

All take their toll.

Now who wants the buffaloes?

A negro section hand was one day ordered to take one end of a saw and cut down a tree. He looked at the saw, gazed at the tree, then as he shuffled away from it he said mournfully, "Ah ain't never built up no trees, and Ah ain't going to help tear none down."

You and I, friend, tore down those trees.

You and I must build them up.

The work is necessary and imperatively immediate. But let's recognize it as our job, not only the lumberman's. He was merely our agent in supplying us with what we needed from our national property.

The rebuilding is not attractive to private capital.

It is your problem of shelter, whether you live on Nob Hill, or whether you hand over a bit of your weekly wage to a grim-jawed landlady; it is the problem of the old man tottering toward the western sun, that he may leave this a better world to live in; it is the problem of the man and the woman, the babe in the cradle, the boy and girl joining hand for the big journey together.

It belongs to all.

And as the devotee of the Southern gentleman's game of "galloping dominoes" is prone to say, "Let's go."

(To be continued)

A Well-Merited Tribute to a Great Lumberman and Statesman.

John Henry Kirby of Texas was recently given a banquet by 700 leading men of that state to testify to their love and admiration for a truly great fellow citizen. What a pity our politicians do not make it possible for such a man of affairs to be president of this great country, which is the biggest business organization in some respects in the world.

The Lumber World Review's story of the banquet and the speeches cover so broad a field that we republish it as of national interest. The Review's report follows:

"Some twenty-two years ago a banquet was tendered to John H. Kirby in the city of Houston 'commemorating the industrial awakening of Texas' and that testimonial banquet was repeated on a larger scale on Saturday evening, November 17, when the ballroom of the Rice Hotel was filled with nearly a thousand banqueters assembled to do honor to him as a man and citizen. Even the cigars which were served paid a tribute to him, being wrapped in a special wrapper with the inscription 'A silent and soothing toast to John Henry Kirby, our Peach Tree Philosopher—the music of the ages in the heart of a child.' While the menu of the old-time banquet was interspersed with sundry mention of absinthe, sherry, sauterne and champagne, the only fizz at the Saturday night affair was in the music, the speaking and the applause; but the enthusiasm of the occasion did not appear to need any alcoholic stimulant.

"Among the more familiar speakers were Judge C. F. Greenwood of Dallas, a friend from boyhood, who pictured the 'Peach Tree Village' of Mr. Kirby's birth; former Governor William P. Hobby who in his remarks read a tribute to Mr. Kirby written by Austin Callan who some years ago said 'The plowboy of an east Texas village is now the prince of the Southern pines' and further that 'the biggest thing about John Henry Kirby is his human side.' Joseph Weldon Bailey, former senator of Texas, telegraphed his regrets at his inability to attend. J. Lewis Wortham of Fort Worth and Gen. Jake Wolters made characteristic eloquent addresses and Judge J. C. Hutchinson, Jr., paid tribute to Mr. Kirby's abilities as a great lawyer. Jack Dionne of Houston, who lost his first opportunity for a speech in the interruption caused by John Bonner, spoke later, paying a tribute from

the lumbermen of the country to Mr. Kirby. Others who spoke were R. B. Creager, of Brownsville; Leon Sonfield, of Beaumont; Judge C. W. Robinson; W. E. Lea, former mayor of Orange; Nelson Phillips, former chief justice of the state, and former Congressman Robert L. Henry.

"Mr. Kirby, who is an occasional orator of national repute, was given scant opportunity to take his turn at oratory. Introduced by the toastmaster near the end of the evening he was visibly affected by the tributes which had been paid him and his hesitating remarks were much broken and disturbed by the static of tumultuous applause. He declared that he had done the best he could, but modestly admitted that he often had failed. 'I know I don't deserve the many tributes spoken here tonight,' he said. 'It wounds me to be called "a man of wealth," because it speaks of greed.

"All that I have gained was due to two things, learning the value of timber from an old friend and guessing right on property values. I never took anything away from any man.

"I want to be remembered as a true, loyal friend. I would rather be a good citizen with reverence for my countrymen, a respect for the flag, and have a willingness to give my life for my country, which is far more important to me than wealth. I have tried to live the life of a true American, a freedom-loving citizen.

"This has been a great honor to me—far more than I deserve, but I love you all for it, and I thank you."

"At one time the banquet took the form of a demonstration in favor of rigid Americanism and against the domination of secret organizations like the Ku Klux Klan. The Houston 'Chronicle' made this the subject of the editorial first column of the first page headed 'Our City' and from its account we quote liberally as follows:

"Seven hundred citizens gathered in Houston Saturday night to pay tribute to a man. There was no thought of politics, no desire to start a crusade of any kind, no plans to organize for any purpose. Those who assembled were there to do honor to the Hon. John H. Kirby.

"The first few speeches were the usual beautiful tributes to friendship and to a fellow worker who had done so much for Houston and for Texas. Then a federal judge rose and in a modest manner told of his friendship and his father's friendship for the guest of honor. Suddenly he began telling what in his opinion good citizenship meant. 'No man is a good citizen,' said the Hon. J. C. Hutcheson, Jr., 'who does not respect the law and do all in his power to uphold the law. He is not a true American who forgets the great principles, on which the government was founded. This country is a republic which guarantees certain inalienable rights to every citizen. It is not and must not be in the hands of any group, whether klan or church or block.' * * *

"Then the cheers began. Men were rising to their feet in all parts of the big banquet room, waving handkerchiefs or napkins. There were yells of approval. Feet stamped wildly and men shouted their enthusiastic endorsement. Everybody soon stood up, even a few Klansmen, who seemingly caught the spirit of the occasion, or who tried not to be made conspicuous by remaining seated. There were five minutes of pandemonium.

"Houston went on record. Great lawyers, former senators and congressmen, a retired Supreme Court judge, leaders in the business world, representatives of labor, ministers of the gospel, and men from every walk of life, joined in the declaration for law, for decency, for religious freedom and in opposition to an 'Invisible Empire.' * * *

"From that time on, set speeches were abandoned. There were spontaneous tributes to true democracy. Hon. R. H. Creager of Brownsville spoke of 'misguided men who were striving to arouse religious and racial hatred and antagonism.' The Hon. Leon Sonfield of Beaumont said, 'This government is one in which the true citizen bares his face for all the world to see. He does not hide it behind a mask. His love of law, of liberty, of his country, is shown by his acts. He does not question his neighbor's religion or promote racial hate or array class against class.' * * *

"That gray-haired representative of the law, Judge C. W. Robinson, paid his tribute to what constitutes true Americanism. He scored those who bow to the dictates of a pretended empire. He put the laws of the land above the edicts of self-appointed rulers. 'The true American citizen does not need a card in his pocket. He isn't made 100 per cent by some dictator's signature. True Americanism is in the heart and mind of every honest citizen.'

"Judge Nelson Phillips of Dallas, a former Supreme Court Judge, paid a most eloquent tribute to the American Constitution, which gives guaranties of religious freedom to all the people.

"But even more impressive than all the speakers was the attitude of the vast assemblage. When men, such as those who were assembled Saturday night, wildly and madly applauded such sentiments, it shows that the fight has been won.

* * *

"At last decency and law and order have been aroused. When 700 men, such as those who assembled Saturday night, go on record so spontaneously and with such unanimous applause, we know the country is safe."

10-Story Chamber of Commerce Building—To Cost \$250,000.

Greenville, S. C.—Plans for beginning construction of its proposed building have been determined by the Chamber of Commerce here and arrangements made for moving to temporary quarters, in order to permit the razing of the old Record building, on the site where the new structure will be located. It is estimated that the new building, which will be ten stories high, will cost \$250,000, details for financing it having been arranged with the Southeastern Life Insurance Co. of Greenville.

It is the purpose of the chamber to lease the ground floor for commercial uses, while its own offices and those of the county farm agent and other officials will probably be on the second and third floors. The remaining offices will be leased. Architect for the building has not been selected. John A. Russell is chairman of the building committee.

Brownwood Considering \$2,000,000 Dam.

Brownwood, Tex.—A project to be advanced by the local Chamber of Commerce calls for a big irrigation dam at a point about ten miles north of Brownwood, near the confluence of Jim Ned Creek and Pecan Bayou. Engineers estimate a cost of about \$2,000,000 for the dam, which would be 2000 feet long, 150 feet high in the center, and approximately 300 feet thick at base. It would be built of concrete core and steel reinforcements. Limestone would also enter largely into the construction.

The dam would form a lake several miles in length, from a half mile to a mile wide, and more than forty feet deep, while the watershed feeding the lake would be more than 50 miles in length. The lake would furnish water for irrigating at least 40,000 acres of arable land.

Plans are being worked out by P. A. Glanville, president of the Brownwood Chamber of Commerce, and a committee of business men, farmers and ranchmen for an irrigation district.

Negroes Share in North Carolina's Educational Program.

During this year, reports the Southern Workman, a monthly publication of the Hampton (Va.) Institute for negroes, North Carolina, will spend \$3,803,000 on negro education. This amount is larger than the sum spent by the state on its entire public school system in 1910. The article states that a million and a half dollars annually are now being spent in North Carolina for new public school buildings for negroes, and in the past four years over \$969,000 has been spent for new buildings alone at three of the State colored normal schools.

Four centers, Elizabeth City, Fayetteville, Winston-Salem, and Durham, have been selected by the state for conducting its teacher training work for negro teachers. Buildings and equipment for these colored normal schools are being provided to supplement the present plants and to make them conform to thoroughly modern standards.

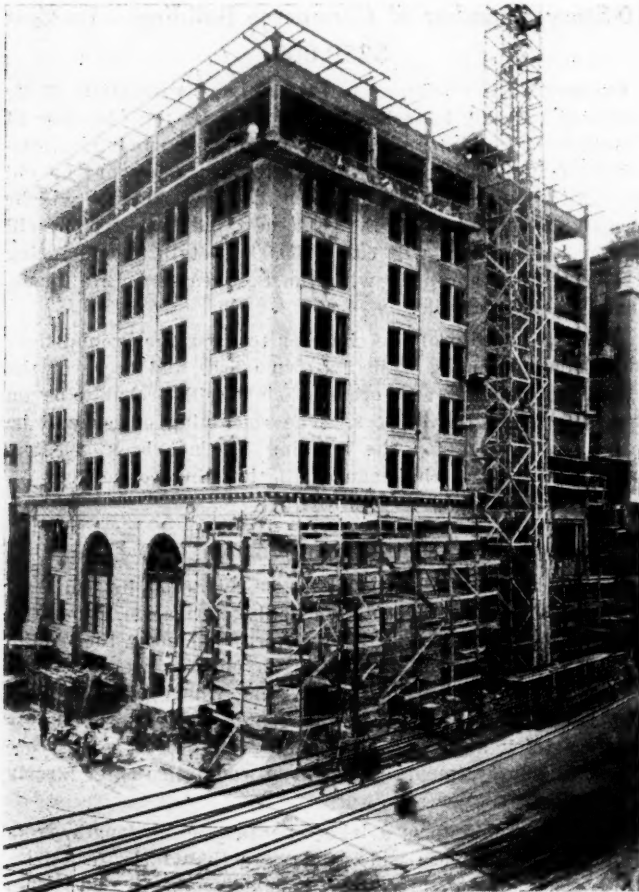
\$18,000,000 in Building Permits at Houston for 1923.

[Special Correspondence Manufacturers Record.]

Houston, Texas, December 14.

Almost one-third of Houston's building program for 1923 is represented in business, public and fraternal structures, each costing in excess of \$100,000.

Building permits for the year have reached \$17,914,314.



\$1,000,000 ANNEX TO FIRST NATIONAL BANK.

There are 12 buildings, some of them about finished, that represent \$5,875,000 of the year's total. These do not include improvements in the Houston Ship Channel district.

The buildings under construction are: Cotton Exchange, 16 stories, \$1,000,000; First National Bank annex, 10 stories, \$1,000,000; State National Bank, 12 stories, \$600,000; Sam Houston Hotel, 10 stories, \$600,000; Keystone building, 10 stories, \$500,000; Electric building, 10 stories, \$500,000; Hermann hospital, 6 stories, \$400,000; Scottish Rite cathedral, 4 stories, \$375,000; Rice Institute chemical laboratory, 3 stories, \$300,000; Baptist hospital annex, 6 stories, \$250,000; Houston Art Museum, 2 stories, \$200,000; Gray Masonic lodge building, 4 stories, \$150,000; total \$5,875,000.

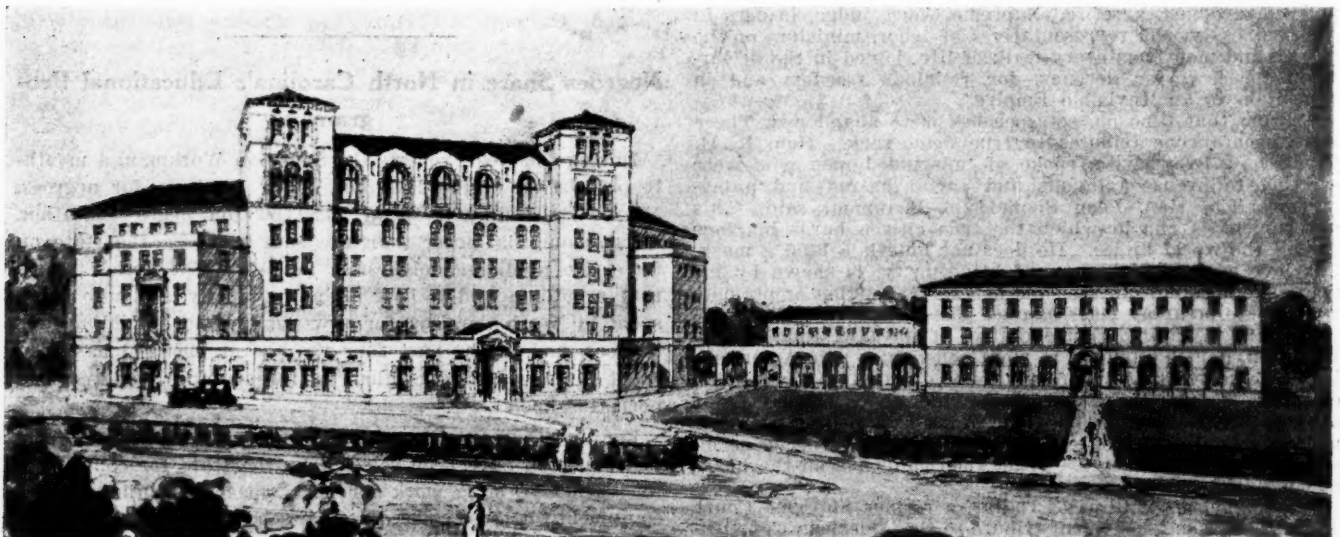
All of these buildings will be completed in the first half of



\$375,000 SCOTTISH RITE CATHEDRAL.

1924. The Keystone building and the State National Bank building will have some tenants January 1, being about complete. The Cotton Exchange building is to be finished in the spring. It will house most of the offices of the cotton factors in the Houston market as well as offices of the agents of shipping lines entering the port of Houston.

While 1923 is the record year in Houston building circles, so far as total expenditure is concerned, more building permits were issued in 1922 than will be issued this year. So far 6277 permits have been granted by the city for 1923 in running up the building permit total of \$17,914,314. In 1922, 6893 permits were issued totaling \$13,390,460.



HERMANN HOSPITAL—MAIN BUILDING NOW UNDER CONSTRUCTION.

A FEW OF HOUSTON'S NEW BUILDINGS.



\$600,000 STATE NATIONAL BANK BUILDING.



\$500,000 ELECTRIC BUILDING.



\$1,000,000 BANKER'S MORTGAGE BUILDING.



\$1,000,000 CHAMBER OF COMMERCE BUILDING.

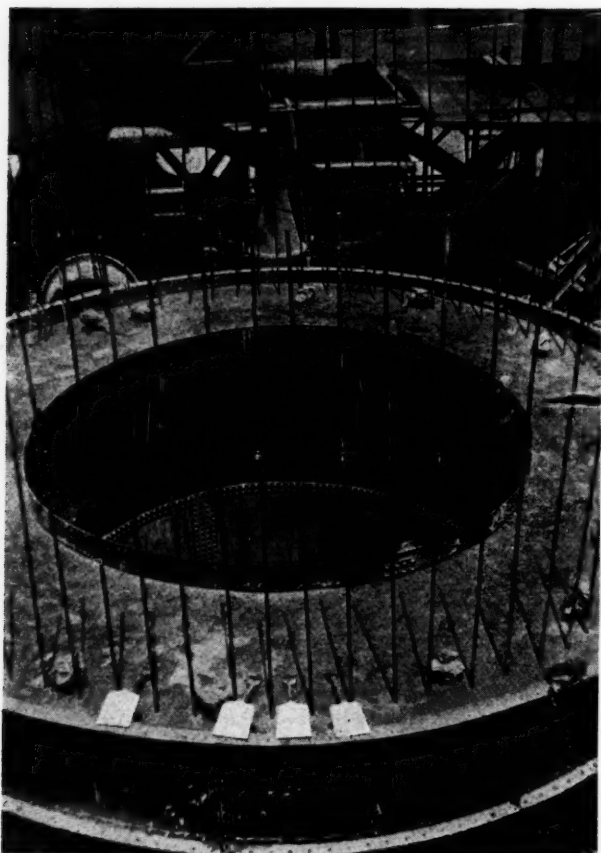
\$3,000,000 Railroad Bridge Being Built in Louisiana.

NEW STRUCTURE AT RIGOLETS CROSSING EAST OF NEW ORLEANS ON THE LOUISVILLE & NASHVILLE RAILROAD—FLOATING CONSTRUCTION A FEATURE.

Construction of a bridge at an estimated cost of over \$3,000,000, and substantial enough to withstand any hurricane likely to occur on the Gulf Coast is being undertaken by the Louisville & Nashville Railroad about 30 miles east of New Orleans. The structure is known as the Rigolets Bridge and is on the main line of the railroad crossing a tidal pass called the Great Rigolets, connecting Lake Borgne and Lake Ponchartrain.

The present bridge was constructed in 1902. The storm of 1909 destroyed eight deck girder spans, and a temporary wood trestle was built to close the opening. In 1911 seven 60-foot through girder spans were built in place of the original spans. But in 1915 a hurricane wrecked 16 of the

Long timber trestles form the approaches, as the marshes over which the line runs are not suitable to support the roadbed. At the east end there will be 7769 feet of trestle and 3430 feet at the other end. Creosoted piles, six to each bent, are used in that portion of the trestle to remain permanently, while four-pile bents of green piles are used where a solid embankment will be placed. The trestles will all be constructed so that they may carry trains for several years

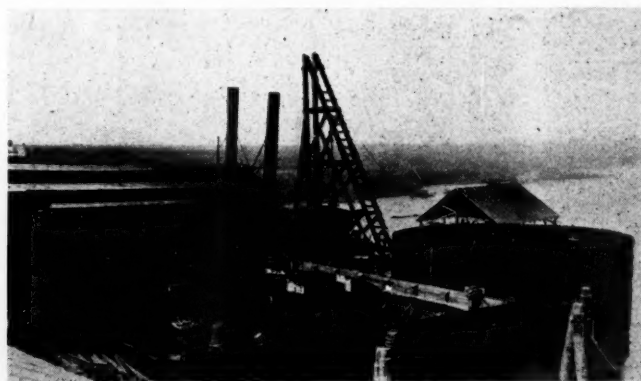


VIEW OF 16x18 FOOT RING REINFORCING SYSTEM.

spans, and since then temporary trestles have been maintained.

The new bridge will consist of eight through-truss riveted spans 330 feet center to center of bearings with a 414-foot swing span, giving a total length of 3097 feet. Special provisions will be made to anchor the spans to resist wind forces. There will be 10 cylindrical piers supporting the spans. The bottom section will be 34 feet in diameter and the top section 28 feet in diameter, and sunk to a depth below mean sea level varying from 78 feet to 113 feet. The sinking is done by dredging through a central dredging well 16 feet in diameter. The pivot pier will be filled solid. The west end pier will be of the usual rectangular type, supported by piles. The height from the mean sea level is 18 feet to the base of the rail and 13 feet 4½ inches to the lowest point of steel.

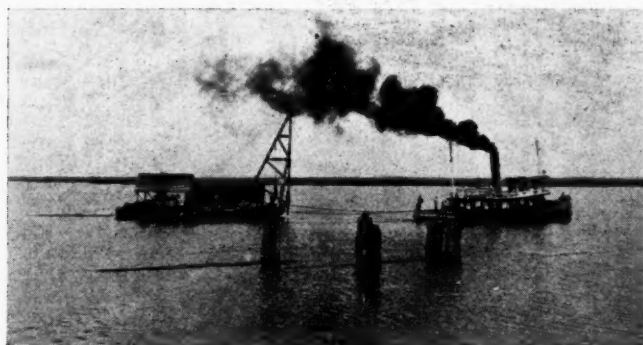
The bridge is being constructed at a distance from the structure now in use, the greatest interval being 200 feet.



ERECTION OF CAISSON IN PONTOON.

to come, thus allowing the embankments to settle and provide for placing additional materials as settling occurs.

The bottom section in each double shell steel cylinder for the piers is made up on a dock and then floated to position, part of a circular steel cofferdam having been previously driven. After the shell is floated into position the remainder of the piling is driven. The cofferdam protects the cylinder from the current. The cylinder is sunk by interior dredging and the use of water jets; the shell is built up and concrete placed as the sinking proceeds. The cylinders are made of ¼-inch and ½-inch steel plates with interior angle rings to which are bolted 24 temporary radial braces. The bracing



TOWING CAISSON INTO POSITION.

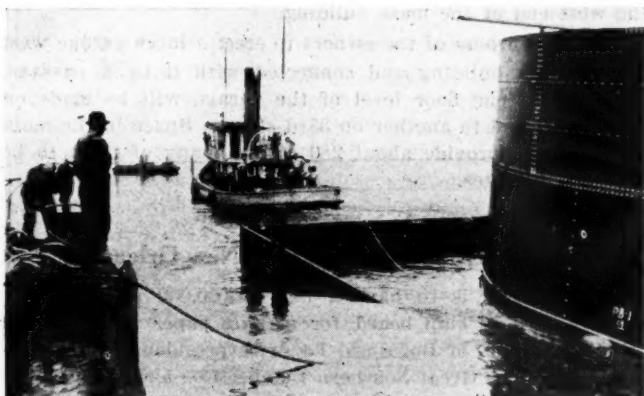
is furnished for two piers only, and it is removed for use in other piers. The conical shell for the cutting edge is braced by 16 frames and has a like number of cast-steel flanges for 2½-inch jet pipes. In the field all joints are caulked to make the cylinder watertight.

The placing of about 27,000 cubic yards of concrete is required, a mixture of 1:2:4 being specified. It is being placed by buckets handled by derricks. The reinforcement is plain round bars of medium steel. In construction of the piers the central well is 16 feet in diameter, and the bottom section is 34 feet and the top 28 feet so that the thickness of walls in

the lower and upper sections will be 9 and 6 feet respectively. Although the steel shells will remain on the piers no allowance was made for the strength provided, as the piers have been so designed as to be sufficiently strong in themselves.

Because there is no solid ground in the vicinity of operations it was necessary to establish docks for storage of equipment, for camp buildings and other temporary structures. Accordingly a spur line 300 feet long was built into water with sufficient depth to allow operation of tugs and barges, and the docks built alongside. Materials are unloaded from cars to the docks and then transferred to barges.

Twenty barges are used in the work. There is a power barge 32 by 100 feet fitted with three boilers, two air compressors and receivers, light plant, pumps, and similar equipment. A concrete barge, 36 by 84 feet is provided with sand



PULLING PONTOON FROM UNDER CAISSON.

and gravel bins, mixer, derricks, hoisting equipment, boiler, water storage facilities, etc. Two barges for dredging within the steel shells of the piers are also used. Other equipment includes: two derrick barges, covered barges for cement; three material barges, two sand barges; one fuel oil barge; three material handling barges, etc.

At present piers 10, 9 and 8 are about completed. Piers 7 and 1 are in process of sinking, and a considerable amount of work has been done on the steel caissons for piers 4, 5 and 6.

The piers were designed in the office of W. H. Courtenay, chief engineer, of the Louisville & Nashville Railroad Company, Louisville, Ky. George G. Bryson is resident engineer in charge of the work. J. M. Salmon is bridge engineer; and G. R. Smiley, chief engineer of construction, has general supervision of the work.

The Missouri Valley Bridge & Iron Co., of Leavenworth, Kansas, are contractors for constructing the piers. E. H. Connor, chief engineer for the company is supervising the work, assisted by C. F. Creever, general superintendent and D. W. Hedrick, as superintendent in charge of this job. Most of the steel for the caissons was furnished by the Lukens Steel Co., of Coatesville, Pa. The shop work on the caissons is handled by the Jahncke Dry Docks, Inc., of New Orleans, La., and that firm also furnishes the gravel and sand for concrete work. Cement is purchased from the Atlas Portland Cement Co., of Leeds, Ala., and New York City.

Purchases Florida Tract for Goat Ranch.

Tampa, Fla., December 15.—[Special]—The purchase by William Strehler, of Kinderhook, N. Y., of a forty-acre tract of pine and truck land at Clarcona Station, near Orlando, for a goat ranch has recently been announced. Mr. Strehler is now operating a breeding farm with Swiss Saanen milk goats on his New York state property.

TWO NEW HOTELS FOR SAN ANTONIO.

Total Cost of Buildings Estimated at \$2,500,000.

San Antonio, Tex., December 15.—[Special]—Two new hotels are in prospect for San Antonio at a total cost of \$2,500,000 for construction. Architects have been invited to submit sketches for a ten-story tourist hotel to be located at Houston street and Avenue E, estimated to cost \$1,500,000. The building will be of reinforced concrete, brick and stone, all rooms to be equipped with baths. Clarence Garrett, secretary of the Medical Arts Building, and associates are promoting the erection of the new hotel.

Atlee B. Ayres and Robert M. Ayres of San Antonio have been selected as architects for the proposed suburban hotel to be erected eight miles north of the city at a cost of \$1,000,000. This building will be fireproof, H-shaped, four stories, of brick and concrete construction, and will contain 500 guest rooms with baths. Names of the owners have not been disclosed.

Henderson, Ky., Plans New Hotel.

Henderson, Ky.—The Community Hotel Co. has been incorporated here to erect a fireproof structure containing 80 rooms. The building will be five stories, 70 by 100 feet, and will cost \$200,000.

H. L. Stevens & Co., Chicago, Ill., are the architects



MODERN HOTEL FOR HENDERSON, KY.

and contractors. Officers of the company are: Alex. Blair, president; C. A. Katterjohn, treasurer; Oscar Monrad, secretary.

College Building Contracts Exceed \$538,000.

Greensboro, N. C.—Building contracts have recently been awarded by the directors of North Carolina College here to an aggregate of more than \$538,000, for the erection of two dormitories, each to accommodate 153 students, a physical education building with gymnasium, and dining hall wing.

The J. A. Jones Construction Co., of Charlotte, was awarded the general contract at \$453,500; B. MacKenzie, Greensboro, heating at \$45,805; W. P. Donaldson, also of Greensboro, plumbing at \$34,577, and the Durham Public Service Co., of Durham, electrical work at \$4804. The Heine Boiler Co., St. Louis, submitted the lowest bid at \$52,100 for boiler work, which includes four 500-horsepower boilers.

Harry Barton, of Greensboro, is the architect for the buildings and J. L. Nelson, of Lenoir, is the chairman of the building committee of the directors.

\$650,000 in Galveston School Contracts.

Galveston, Tex.—Contracts reaching an aggregate of more than \$650,000 have been awarded by the board of school trustees of this city, the work to include additions and improvements to the Ball high school, Sam Houston and Davy Crockett schools, and for the erection of the new Goliad school. The Standard Construction Co. of Houston was awarded general contract for the erection of the Goliad school at \$182,350, general contract for the other three was awarded to Walsh & Burney of San Antonio, at \$363,146.

Other contracts include plumbing, for which A. H. Shafer of San Antonio secured contract for all four buildings at \$38,390; heating and ventilating for all buildings, Kinnison Bros., Dallas, at \$56,500, and electrical work to Kirkwood & Wharton of San Antonio, at \$15,595.

De Witt & Lemmon of Dallas, and W. B. Ittner of St. Louis, are the architects for the buildings. Malcolm Graham is the chairman of the building committee.

\$300,000 Presbyterian Church for Spartanburg.

Plans are being developed for the erection at Spartanburg, S. C., of a \$300,000 building by the First Presbyterian Church, formal authority for building the structure having been vested in the officers of the church by the congregation. The building will be located on East Main street, occupying a site 400 by 200 feet.

According to preliminary plans, the main auditorium will have a seating capacity, with balcony, of 1000. The Sunday School section and other units will be erected some distance back of the main auditorium, an arrangement which will provide space for a lawn and the construction of walks. Separate departments for each of the Sunday School groups, with probably several groups added, have been provided in the plans. The Sunday School section will be two stories and will contain a chapel to seat 200. Lockwood, Greene & Co. of Boston and Atlanta, with offices in Spartanburg and other Southern cities, are preparing plans and specifications. The structure will be of the Norman Gothic type.

A. M. Law is chairman of the building committee.

Contract for 12-Story Medical Arts Building at Kansas City.

Kansas City, Mo.—General contract has been awarded by the Clark Estate to the Reyburn Engineering & Construction Co., of Kansas City, for the erection of the 12-story Medical Arts Building at Broadway and 34th street. Plans for the building have been drawn by George B. Post & Sons, with offices in this city, New York and Cleveland, the design being approved by the Jackson County Medical Society.

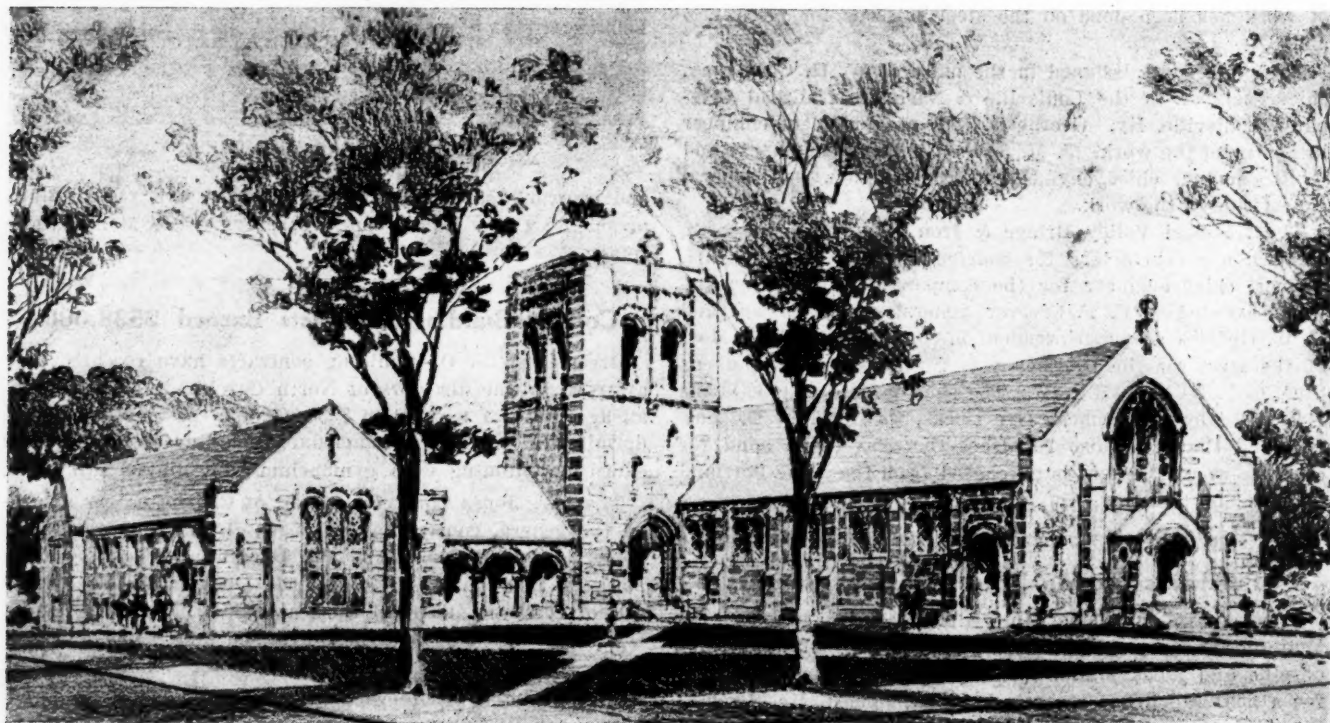
The present Tattershall apartment hotel will form a wing to the new building, and hotel and dining facilities of the Tattershall will be an adjunct to the new structure on the south. An auditorium to seat about 275 persons will be located in a central court space between the hotel and the building. The medical library and reading room will be at the west end of the main building.

It is the purpose of the owners to erect a large garage west of the main building and connected with it by a passage. Entrance to one floor level of the garage will be made on 34th street and to another on 33rd street. Space in the main building will provide about 280 offices, many of them to be grouped in suites.

New \$1,000,000 Plant for New Orleans.

New Orleans is to have a new \$1,000,000 plant for the manufacture of chip board for making paper boxes. Mayor W. H. Sullivan, of Bogalusa, La., vice president and general manager of the Great Southern Lumber Co., and of the Bogalusa Paper Co., wires the MANUFACTURERS RECORD regarding this development as follows:

"Bogalusa Paper Co. are going to install 96-inch cylinder paper machine in New Orleans to manufacture chip board and all other kinds of board used in manufacture of containers. As soon as this machinery is in operation, they expect to install machinery to manufacture solid fibre and corrugated shipping cases, also all kinds of small boxes. Expect to have plant in operation within four or five months."



NEW FIRST PRESBYTERIAN CHURCH TO BE ERECTED AT SPARTANBURG.

CERAMICS DEPARTMENT FOR GEORGIA SCHOOL OF TECHNOLOGY.

Ground Broken for Structure to House Kilns and Laboratory—First and Only Ceramics Building in South.

By action of the State legislature and with the co-operation of public-spirited citizens of Georgia, a ceramics department has been established at the Georgia School of Technology at Atlanta, for the accommodation of which a new building will be erected. This is the first building of its kind in the South, and the only one.

As defined by Dr. M. L. Brittain, president of the school, ceramics has to do with the manufacture of those products which are made from non-metallic minerals, drawing largely upon clays of all types, limestones and sand, and utilizing in a small way, bauxite, feldspar, quartz, fullers earth, etc.

Largely through the leadership of Senator Carswell, the Georgia legislature appropriated \$10,000 annually from next January, for maintenance only of the department. Funds for the erection of a suitable building and necessary equipment are being secured from other sources, Fulton county having contributed \$10,000 for this purpose. Other contributions have been made by the Bickerstaff Brick Co., of Brickyard, Ala.; Bibb Brick Co., Macon, Ga.; J. B. McCrary Co., Atlanta; M. C. Kiser, B. Mifflin Hood Brick Co., Atlanta; Central of Georgia Railway Co.; Atlanta Terra Cotta Co.; Atlanta Chamber of Commerce; S. J. Warner, William Wilson, Stevens Pattern, Milledgeville Brick Co. of Milledgeville, Ga., and others.

The value of cash and other contributions as represented by the subscribers enumerated, is estimated at upwards of \$14,000, which is probably less than half the amount needed for the erection of the building and installation of equipment. Dr. Brittain expresses himself as hopeful of the future and is confident that business men will lend whatever assistance is needed to enable the department to equip itself for the best possible work in the development of the ceramic resources so abundant in Georgia.

The Central of Georgia Railway Co., of which J. M. Mallory is the industrial agent, has taken a very active interest in the establishment of the new department and for the past year has had Professor R. T. Stull making examinations and reports on the territory which it serves. Professor Stull, who has been connected with this work at the University of Illinois and the United States Bureau of Mines, is said to be thoroughly convinced that the development of the non-metallic minerals of Georgia will go far industrially toward replacing the ravages of the boll weevil.

Ground has recently been broken for the building, which

will be located at the northwest corner of Third and Fowler streets. It was designed by the Department of Architecture of the school.

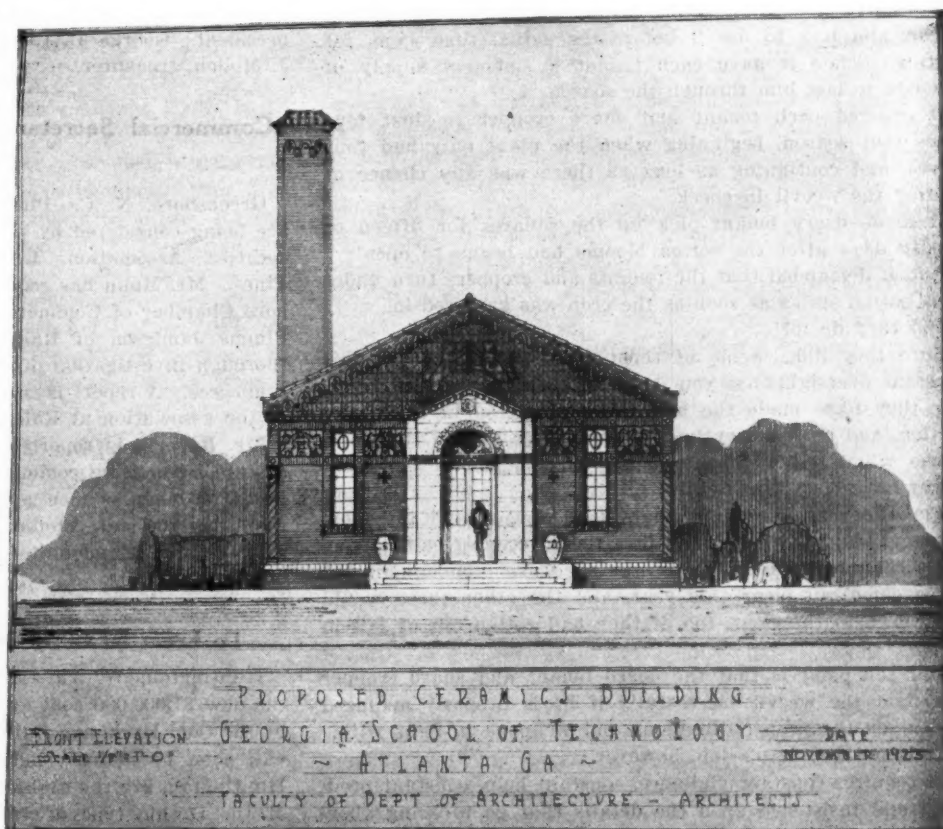
Arthur V. Henry, of Ohio State University, has been selected as the head of the new department. Mr. Henry is a ceramics engineer of wide reputation, possessing both the bachelor's and master's degrees in ceramics, and it is understood that he will receive his doctor's degree before he assumes his new duties on next February 1. In company with Mr. Mallory and Professor Stull, he has already examined some of the many clay deposits of the state.

Standard Oil to Use Ohio River for Transport of Its Products from Huntington to Parkersburg, W. Va.

Huntington, W. Va., December 15—[Special]—The Standard Oil Co. plan an innovation in the transportation of gasoline and oil and the distribution of such products in Huntington and the Guyan Valley, which, it is believed, will materially reduce transportation costs. It will transport oil and gasoline products from Parkersburg to Huntington by way of the Ohio River and will possibly handle its products for other distributing centers on the Ohio in the same way. Rail shipments of oil and gasoline intended for Huntington will be abandoned it is thought, and the river route used.

The company is reported to have leased a 100-foot frontage along the Ohio River near its new plant at Seventeenth street and will install pumps and other machinery to convey oil and gas to storage tanks. It is planned to transport oil and gasoline from the Parkersburg refinery of the company to the docks at Huntington and pipe them to tanks and distribute by trucks in the city.

Other companies shipping to Huntington and supplying service stations will also follow the same policy, it is understood. The Ohio Valley Refining Co. has received already a barge of gasoline holding 44,000 gallons from a point up the Ohio River.



CERAMICS, BUILDING TO BE ERECTED BY GEORGIA TECH.

NEGROES CAN SUCCESSFULLY FIGHT THE BOLL WEEVIL.

Interesting Experiments by Armour Fertilizer Company in Georgia.

Atlanta, Ga., Nov. 19.—[Special]—One of the principal arguments advanced by the pessimist against the use of calcium arsenate in dusting for the boll weevil is that the negro tenant and share cropper does not know how to dust, cannot dust, and will not dust as directed.

Consequently, he cannot fight the boll weevil, and all of the government's well-meant advice and suggestions have gone "blooey."

All of which is important, if true.

But Dr. R. J. H. DeLoach, chief of the research department for the Armour Fertilizer Company, has just completed some experiments on Arlington Farms, owned by the Armour company, which indicates that it isn't so.

Indeed, out of 78 negro laborers on Arlington farms, 42 are share croppers, which will give some idea of the number of negroes on the farms. The Armour company left the entire farm virtually in the hands of negro tenants just to see if they could be induced to grow cotton under modern methods.

To begin with, the company took the attitude toward its share croppers and colored tenants that any sensible landlord ought to take. It gave the orders, and the tenants and share croppers either had to follow them or get out.

That was the first step in the program.

It specified that only certain varieties of cotton could be planted, and supplied the tenants and share croppers only with those varieties.

It demanded that at least 500 pounds of a 10-4-5 fertilizer be used to the acre, put in before the cotton was planted to give it a good start, and furnished that fertilizer.

It saw to it that the cotton was planted on time, and was given the right sort of cultivation when up.

It secured a calcium arsenate duster for each tenant and taught him how to use it before the actual time came for dusting. Then it gave each tenant a sufficient supply of arsenate to last him through the season.

It ordered each tenant and share cropper to dust four times that season, beginning when the plant only had four leaves, and continuing as long as there was any chance of holding the weevil in check.

It made every tenant pick up the squares for fifteen or twenty days after the cotton blooms had begun to open.

And it demanded that the tenants and croppers turn under their cotton stalks as soon as the crop was gathered in.

Did they do it?

Sure they did. Some of them grumbled a little at this constant oversight, but you don't hear them grumbling now. For they have made the best crops of cotton in the entire section, and have money in the bank and cotton in the warehouse where other farmers have only memories of "what might have been."

For the rigid directions that Dr. DeLoach and his farm managers laid down resulted in a record crop of cotton from the Arlington farms. Out of the 42 share croppers all but three came out clear this year, and the other three would have been in the clear, too, if they had gotten out of jail in time.

But the point is that the negro tenant and share cropper can fight the weevil successfully if he is properly managed and given the proper directions and weapons to fight with.

It is no lazy man's job, however.

It requires constant vigilance, constant help, constant prodding and insistence upon the details that go to bring about success in the fight against the boll weevil.

But it can be done.

It has been done this year at Arlington farms and it can be done again at any place and any time when the owner of a plantation will quit crying and go to work.

As Dr. DeLoach says, the way to fight the weevil successfully is to teach your tenants how to fight, stay on the job and help them carry on the fight, and then, when the fight is won, let them share some of your prosperity.

It won't take more than a couple of seasons for the tenant and share cropper to realize the fact that he won because he followed directions, and then it is going to be easier and easier each year.

As for the negro being unable or unwilling to fight the weevil, that, according to Dr. DeLoach, is all wrong. He may be too scared to fight him. He may be too ignorant to fight him. But if you will show him how and help him, he'll do his part in the performance.

The only man who doesn't get anywhere is the man who is too lazy to put up a real fight.

Seek \$3,000,000 for Harding Memorial—To Use \$1,500,000 to Erect Mausoleum and Create Shrine.

The work of raising \$3,000,000 for the establishment of a memorial to the late President Warren G. Harding is being pushed by the Harding Memorial Association which is receiving donations from citizens of the entire country. It is the purpose of the association to use one-half of the sum for the erection of a mausoleum and the creation of a shrine, \$1,000,000 for investment as an endowment in Government bonds for the perpetual maintenance of the mausoleum and shrine, and the remainder for use as the board of trustees shall deem best for perpetuating the ideals of understanding in diplomacy and the functions of government, through co-operation with an educational institution or otherwise, as the trustees shall decide.

Officers of the association include President Calvin Coolidge, honorary president; Joseph Frelinghuysen, acting president; John Hays Hammond, first vice president; John Barton Payne, second vice president; Albert D. Lasker, third vice president; George B. Christian, Jr., secretary, and Andrew J. Mellon, treasurer.

Commercial Secretaries Plan to Advertise North Carolina.

Greensboro, N. C.—Plans for advertising North Carolina are being considered by the North Carolina Commercial Secretaries' Association, J. Vear Mann, president, Southern Pines. Mr. Mann has requested C. W. Roberts of the Greensboro Chamber of Commerce, Burke Hobgood of Durham, and Simms Jamieson of Raleigh, to act as a committee for a thorough investigation of the plan for a state department of commerce. A report is to be made at the mid-winter meeting of the association at Raleigh in January.

Mr. Roberts is reported as favoring the establishment of a state advertising commission whose personnel will be composed of business men appointed by the governor, and suggests that the state should appropriate \$100,000 a year for ten years or for an indefinite period, to be expended by the commission.

To Erect \$1,000,000 Coal Exchange Building.

Huntington, W. Va.—Announcement has been made that the new \$1,000,000 coal exchange building to be erected here by the Coal Exchange Building Co., Inc., Abe Solof, secretary, will soon be under construction. Meanor & Handloser, of Huntington, are the architects for the building, which will be of the Gothic type of architecture and contain 325 offices. It will be fireproof, of steel, terra cotta, stone, concrete and brick construction. Four elevators will be installed.

Committee to Judge Exhibits of Florida Architects.

Jacksonville, Fla., December 15—[Special]—George L. Pfeiffer of Lemon City has been appointed chairman of the committee to judge works submitted by members of the association in competition for the M. Leo Elliott gold medal to be awarded for the best work in 1923. The appointment was made by Fred A. Henderich, president of the Florida Association of Architects, Inc. All exhibits must be in the hands of G. M. MacDonough, secretary of the association, P. O. Box 4403, Jacksonville, not later than January 1, 1924. Mr. MacDonough will immediately submit them to the committee.

Conditions stipulate that works must be done without cooperation with any associate outside of Florida, and that exhibits must be photographs not less than 5 by 7 inches in size and may be as much larger as desired. As many views, both exterior and interior, may be submitted as will be necessary to show the work to the best advantage.

In addition to Mr. Pfeiffer, other members of the committee include F. O. Adams, Jr., Tampa; Ida Annah Ryan, Orlando; Walker D. Willis, Pensacola, and LeRoy A. Sheftall, Jacksonville.

Competition for \$250,000 Memorial Hall Plans.

Joplin, Mo.—Notices announcing a contest to close January 21, for the purpose of selecting the best plans for Joplin's proposed \$250,000 memorial hall, have been mailed to twelve architects, including A. C. Marquis, Smith & Van Pelt, Stanley C. Elawn and Trueman Martinie, all of Joplin; MacClaren Hetherington, Colorado Springs, Col.; Study & Farrar, St. Louis; Coolidge & Hodgdon, Chicago; Arthur Beck, Independence, Kan.; William Schmidt, Oklahoma City; Carl Bowler, K. H. Buckley and Edgar Bell, all of Kansas City, Mo.

Plans are to be submitted to the memorial hall architect committee at Joplin, after which a jury composed of a Joplin architect and three members of the memorial hall advisory board will consider them and make the selection.

St. Louis to Begin \$12,000,000 Waterworks Extensions—Will Sell \$2,000,000 of Bonds.

St. Louis, Mo.—In accordance with plans of E. E. Wall, water commissioner, the sale of \$2,000,000 of the \$12,000,000 water bond issue voted last February has been authorized by the Board of Estimate and Apportionment. The proceeds from this first sale of water bonds will be used for the construction of railroad yards, buying rights-of-way and for building intakes and engine pits.

The construction of pipe lines connecting the new waterworks with the city mains is projected for June and the construction of new settling basins for next September. It is contemplated that \$5,590,000 will be expended in 1924.

St. Petersburg to Have \$250,000 Church.

St. Petersburg, Fla.—Preliminary plans for the erection of a \$250,000 building here have been announced by officials of the Southern Methodist Church. Arrangements for the building have not been worked out in detail, but it is understood that the proposed church will have an auditorium to seat 2000 and a Sunday School room to accommodate 1800. A kitchen will be installed in the basement of the new building, while the second floor will provide space for church offices and Sunday School rooms.

Members of the building committee are S. D. Harris, S. E. Walker, John S. Smith, I. P. Byron, Mrs. Leila Dusenbury, R. T. Thorn and E. A. Hinds.

Chesapeake & Ohio Railway will build 25 caboose cars in its own shops.

Improvements to Steamship Terminal Property.

Tampa, Fla., December 15—[Special]—The Mallory-Gulf Terminal Co. has purchased waterfront property at the foot of South Franklin street here which it has occupied under lease for several years, and plans the early construction of a modern warehouse. The terminal company was recently incorporated and extensive improvements in service by the two lines are contemplated.

The property fronts 1250 feet on the deep water channel and runs back 250 feet to Water street. The warehouse will be of sufficient size to accommodate increased business in the future.

H. H. Raymond, president of the Mallory Steamship Co. and the Gulf & Southern Steamship Co., who recently attended a meeting here of terminal company officers, indicated that in the near future the Mallory Line service between Tampa and New York would undergo considerable improvement and that larger ships would be placed on the run.

\$550,000 Building Program by One Firm.

Richmond, Va.—The building program of Davis Brothers, Inc., of this city for the spring of 1924 calls for the expenditure of \$550,000 for the erection of forty residences, an apartment house and apartment flats in the west end of the city. Ground for eight dwellings has already been broken. These will be modern in all details and will be equipped with sleeping porches, concrete front porches, tiled baths and laundry tubs. Each will contain six rooms. The other dwellings will be erected next spring.

In addition to the dwellings, there will be a six-family apartment, each suite to contain six rooms, two baths and lavatory, and six family apartments, each apartment with four rooms and bath.

Associated Industries of Alabama Meeting.

Birmingham, Ala., December 17—[Special]—The fourth annual meeting of the Alabama Manufacturers Association on Tuesday last was attended by a goodly number of representative manufacturers. L. Sevier, Birmingham, president, was in the chair, and reported on the workings of the association and its progress. Resolutions were adopted protesting against government ownership of railroads and the adoption of laws which tend to hamper railroads; endorsement of Secretary Mellon's idea as to reduction of taxation; asking railroads to put on home-seekers rates again and opposing Senator LaFollette's bill on the judicial question.

The association changed its name to The Associated Industries of Alabama. L. Sevier was re-elected president.

Importations of European Cement.

R. M. HYAMS, New Orleans.

In your valuable journal of October 25, we read:

"EUROPE DUMPING CEMENT ON UNITED STATES—It is reported that representatives of the Treasury Department have been instructed to investigate the heavy shipments of European cement to this country to see if there is an opportunity for the application of the provisions of the anti-dumping act in regard to foreign cement."

If the representatives of the Treasury Department will investigate the cement trust in this country and the prices it charges for cement, they will readily understand why contractors are importing that article.

General contract for the erection of a \$275,000 hospital at Fort Benning, Ga., has been awarded by the Government to E. A. Baehl & Co., of Leavenworth, Kan. The building will be 285 by 60 feet, of concrete, steel and tile, with a tile roof. Contracts for heating, lighting and elevators have not been awarded.

THE IRON AND STEEL SITUATION

An Analysis of the Year's Steel Production.

Pittsburgh, Pa., December 17—[Special]—The rate of steel ingot production decreased from October to November by 9 per cent, but there is little further decrease this month. Recent decreases are attributed to slack buying on account of jobbers and manufacturing consumers wishing to have inventory as light as possible. Predictions are general that steel mill operations will be increasing right after January 1. There can be no doubt that steel buyers have been in conservative mood for months past, and reduction of stocks goes with that attitude, hence it is perfectly reasonable to expect heavier production after January 1. On the other hand there is nothing in the present outlook to indicate that the very high operating rate of last spring will be reached again.

With the November report on steel ingot production it is found that the total in 11 months of the year is 40,383,191 gross tons, pointing to a total for the calendar year of a trifle over 43,000,000 tons. This falls a half million tons short of the record made during the war, in 1917.

As to comparison with peace time operations, the production in the four post-war years 1919 to 1922 inclusive, averaged 32,000,000 tons a year, with 1920 a high year, 1921 a low year and 1919 and 1922 falling between. This year's production of 43,000,000 tons must therefore be considered very high, when it is 35 per cent above the average of the four preceding years.

The annual average for five years, through 1923, would be 34,200,000 tons, and as a matter of arithmetical comparison it is interesting to note that 1924 production of steel could be 10 per cent below that of 1923 and still be 13 per cent above this five-year average. That is, 1924 can be a good year from a tonnage standpoint and yet not be as good as 1923. While actual guesses so far ahead cannot be made, this represents an approximation to the expectations now entertained in the steel trade. At the same time it is pointed out that since in 1923 much low-priced business, taken in 1922, was being filled, 1924 could show a considerable decrease in tonnage and yet bring fairly good profits, provided substantially present steel prices are maintained.

The outlook as to steel prices is simply this, that as to pipe, wire products, rails, sheets and tin plate there is practically no question, while as to bars, shapes and plates there is a question whether some decline may not occur soon after the turn of the year. Among buyers there are many predictions that a decline will occur, while the mills are rather non-committal on the subject.

The Steel Corporation's bookings in November represented about 60 per cent of productive capacity for the month, against 65 per cent in October and less than 60 per cent in each of the four preceding months. November bookings, however, were swelled by a large quantity of first half tin plate business and a considerable volume of rail business for the same period, so that, other things being equal, December bookings will run considerably lighter. January may show a large increase in bookings, by there being more prompt buying and more forward buying. Of forward buying there is still very little, rails and tin plates standing by themselves in this respect.

Shading in sheet prices, of which there has been more or less since last August, but only for prompt deliveries, has diminished further and it looks as if it would soon disappear entirely. Sheet mills have been having a better operation than in October.

In each of the past three weeks about 2500 freight cars

have been bought, representing a rate that would maintain a fair operation for the car shops. Large individual orders are not expected. Fabricated steel lettings have been showing increases in the past couple of weeks, and quite an improvement over the showing for October.

Pig iron is very dull again, but the slight advance in prices that occurred after the recent buying movement is well maintained, with Bessemer at \$23, basic at \$21 and foundry at \$22, valley.

Connellsville furnace coke business for first quarter has been practically hanging fire, after the early buying. Prices quoted are \$4.25 to \$4.50 and with the spot market not overly firm at \$4.00, furnaces are in doubt whether to cover, the chief argument for buying through March being the possibility of a coal strike.

The Carnegie Steel Company has again bought heavy melting steel scrap, taking 5000 tons at \$19, the price paid on the former purchases. One other consumer in the district has paid \$18.50, other consumers not being in the market at all.

Better Feeling Again in Birmingham District.

Birmingham, Ala., December 17—[Special]—The pig iron market in the Birmingham district is taking on a little strength again and the year promises to close with a decidedly better feeling than for the past four months and longer. Some few sales are still being made. A scarcity of some grades has been sounded out so far as the first quarter of the coming year is concerned. Quotations which for the past few weeks have been on a \$21 per ton base, No. 2 foundry, are showing firmness and an inclination to go up. One or two companies in this district have never sought business under \$22 and those which have been in the market actively are now sounding out the \$22 price.

The production in Alabama is at a pace above 215,000 tons a month. Statistics will show a larger production for 123 than has been reached any year in the history of the industry save one, that of 1917, during the war. The surplus stock of iron is below the 85,000 ton mark, including basic and other kinds of iron with foundry.

Within three months at the present rate there should be an almost complete reduction of the surplus stock of iron in this state and then the probable make will have to care for the demand. The first impetus in buying will mean a greater production, and this can be accomplished in a short while. The Alabama Company is working on its furnace out for repairs at Gadsden. The Sloss-Sheffield Steel & Iron Company now has four furnaces in blast and within 30 days could get another going. The Woodward Iron Company has two furnaces at Woodward going and one of the Vanderbilt furnaces. The third Woodward furnace is being repaired and will be ready for the torch again in January.

Inquiries have started as to iron for the second quarter of the year. There has been an intimation that furnace interests have not been pushing the market for the reason that a higher quotation was anticipated in the future. Some of the inquiries have been answered, no concessions being offered, and there is belief that before the close of the year a little buying movement will have started. Deliveries are beginning to ease up some except where the lots are small and the melters intend keeping in operation to within a couple of days at Christmas. Several of the iron using companies in the district have made it plain that there will not be a very lengthy shut down for the holidays. One or two plants, melting from 50 to 100 tons of iron daily, are now

estimating a close-down for two to three days. The big pressure pipe plant, American Cast Iron Pipe Company, will be down from December 22 to December 31, but repairs are to be made in the meantime. Other plants will be down not more than 10 days, in fact very few expect to be shut down that long.

The sanitary pipe trade has been showing improvement lately. With one exception all plants at Anniston, where the largest amount is manufactured, are in operation. The plants in Gadsden, Birmingham and Bessemer are receiving some contracts and the old year is going out with a decidedly better feeling.

Water and gas pipe prices have settled on four inch, water, \$49-\$50; six-inch, \$47, larger sizes shading down to \$46; four inch gas, \$56, six inch, \$52. Standard sanitary pipe is quoted at \$55 and heavy grade \$45.

The coal market continues quiet as to steam coal and strong as to domestic. The production is around 345,000 to 350,000 tons a week. The prices are low. While nothing is said as to an emergency next April when the bituminous coal operators of the middle west are likely to be unable to supply fuel, it is known that the Birmingham district can handle considerable business.

The coke market is still lagging. Curtailment in production has taken place so that there may not be too much coke produced. The Semet-Selva plant has cut down 30 ovens to 210; the Alabama Company has closed down beehive ovens at Searles, the Woodward Iron Company has a portion of a battery under repairs at Woodward. Quotations for coke are still down around \$5 per ton.

The scrap iron and steel market shows a little more firmness but there is no activity. The prices remain about the same. Dealers are receiving inquiries but they are not evincing enough interest to contract tonnage for delivery into next year. Inquiries were received recently from Paris, France, as to old material laid down at Mobile or New Orleans, but there is no expectation that any business can be gotten through that channel. Specifications are feared.

The Birmingham district was again visited by foreigners, the past week, seeing representatives of the Soviet in Russia. The Russians were interested more particularly in cotton gin machinery and went through the plants in Birmingham.

Among the lettings for cast iron pipe, pressure pipe, recently received was a second order from Kansas City, Mo., this time for 580 tons, the first one the early part of the month being for 1154 tons. The American Cast Iron Pipe Company received both of these orders.

V. Everit Macy, New York, Judge J. M. Dickinson, Chicago, Ill., a former secretary of war, Harry E. Colton, Nashville, Tenn., stockholders and directors in the Alabama Fuel & Iron Company, a large independent coal producing company of this district of which Charles F. DeBardeleben is president, spent a portion of the past week in Birmingham inspecting properties of the company and visiting the steel plant of the Tennessee Coal, Iron and Railroad Company.

Quotations for pig iron and iron and steel scrap follow:

PIG IRON	
No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces,	\$21.00;
No. 1 foundry, 2.25 to 2.75 per cent silicon, \$21.50; iron	of 2.75 to 3.25 per cent silicon, \$22.00; iron of 3.25 to 3.75 per
cent silicon, \$22.50; iron of 3.75 to 4.25 per cent silicon, \$23.00;	charcoal iron f. o. b. furnaces, \$32.00 to \$33.00.
OLD MATERIAL	
Old steel axles	\$17.00 to \$18.00
Old iron axles	20.00 to 21.00
Old steel rails	14.00 to 15.00
Old steel rails (short)	18.00 to 19.00
Heavy melting steel	12.00 to 13.00
No. 1 cast	18.50 to 19.00
Stove plate	14.00 to 15.00
No. 1 R. R. wrought	14.00 to 14.50
Old car wheels	15.00 to 16.00
Old tramcar wheels	15.50 to 16.50
Machine shop turnings	6.00 to 7.00
Cast iron borings	8.00 to 9.00
Cast iron borings (Chem.)	16.00 to 17.00

RAILROADS

CANADIANS SETTLE IN THE SOUTH.

Nineteen Hundred Acres of Cut-Over Lands in Mississippi Occupied Immediately.

The "G. M. & N. News," a little paper published by the Gulf, Mobile & Northern Railroad Co., reports the sale of 1900 acres of land on November 14 to a group of Canadian farmers who were seeking a location for settlement in a climate milder than that of western Canada. This was the first sale made through the Alabama-Mississippi Improvement Association, the organization of which, fostered by the railroad company, whose director of development is J. B. Haman, was reported in the MANUFACTURERS RECORD some months ago. The land sold to the Canadians was listed with the Association by Bentley & Emery, lumbermen of Richton, Miss., on November 12, it is stated, and the next day it was shown to the Canadians, who closed the deal on the following day. They had been making their headquarters at Mobile for about a month while looking over lands in Alabama and Florida. Twenty families will be settled on this tract adjacent to Richton.

It is further stated that one week after the land was listed for sale the Canadians were at work on it and that Mr. Genik, their spokesman said that in a year from now they will have 20,000 laying hens on the property. They have already ordered 1000 pecan nut and pear trees to be planted and every family will put in strawberries and other fruit and trucking crops. A member of the colony has gone back north to tell of the opportunities in the South and he is reported as writing that already he has influenced twenty-seven families to come South as soon as places can be arranged for them to live. Mr. Genik and his party have begun building a community house on their property. It will be used as a clearing house, women and children occupying it while the men will sleep in tents until several dwellings now under construction are completed. As one home is finished the family to occupy it will move from the community house and another family from the north will take their places in this central building.

An interesting story is told of the experience of one family and the hospitable welcome which they received as follows: "The party arrived at Richton at 11 o'clock in the morning. The only woman in the party, the mother of five children, the youngest fifteen months old, was completing a journey of five days and nights with her little ones, coming from Winnipeg to Richton. There was no stove in the house that had been rented and no way to prepare food for the noonday meal, but platter after platter was sent in by neighbors, including warm milk for the baby. A load of wood was placed in the yard and everything done to aid them in getting fixed up before night." In addition to this the school principal and three teachers called and arranged for the three children of school age to enter the school next morning, when they were taken to school in the principal's car.

It is said that this settlement is the result of a search for a suitable location which the Canadians have been conducting for eight years and that three things largely contributed to the deal, the first being the sale plan, the second being the belief of everyone in the association in the advantages of the section, and third the kindly treatment extended to the visitors.

Next year the Association proposes to have a motor truck equipped with an electric lighting outfit and a moving picture machine and this will be sent out through the crowded farming regions of the Middle West to present the advantages of this part of the South for agricultural and truck raising.

The Canadians now at Richton were in Canada for more

than thirty years. They were originally Austrians. It is expected that other large settlements will be made before next summer on the cut-over lands in Alabama and Mississippi.

High Lights in Freight Traffic.

The railroads of this country during the first ten months of this year handled the largest freight traffic ever offered to them, according to reports filed with the Bureau of Railway Economics, Washington, D. C. This traffic amounted to 386,027,840,000 net ton miles, an increase of 2.4 per cent as compared with the corresponding period of 1920 which year held the previous high record. As compared with the first ten months of last year the total showed an increase of 28 per cent, although it must be remembered that traffic in 1922 was considerably affected by the miners' and the railroad shopmen's strikes. During October of this year the freight traffic amounted to more than 42,200,000,000 net ton miles, an increase of over 7 per cent as compared with October of last year.

Loadings of revenue freight on the railroads during the week ended December 1, according to the car service division of the American Railway Association, totaled 835,296 cars, or 154,921 cars less than the previous week, the decline being due to the holiday of Thanksgiving Day. It was also a decrease of more than 5000 cars as compared with the corresponding week of last year, this being accounted for by the fact that the railroads this year have conducted a shipping campaign to encourage earlier movements of certain freight that heretofore has been shipped in the autumn, when the crop and the coal movements are always heaviest. This is shown by the fact that for 38 weeks from March 10 to November 24 an average of 1,000,000 cars weekly were loaded with revenue freight. The total for the year from January to November inclusive is over 46,500,000 cars thus loaded.

Freight cars were handled more expeditiously in October this year than ever before, according to reports filed with the Bureau of Railway Economics. The average daily movement per freight car for the month was 30.7 miles, which, it is stated, has never been approached for the country as a whole in any month since the compilation of these records was begun in 1917. This was an increase of 4.1 miles as compared with October of last year and 3.9 miles as compared with October 1920. Compared with September of this year it shows an increase of 1½ miles. For the first ten months of this year the average daily movement per freight car was 27.9 miles an increase of 5 miles as compared with the same period of last year, which shows how the railroads are rapidly increasing the movement of freight.

New Equipment, Rails, Etc.

Santa Fe System has ordered 104,000 tons of rails, of which 70,000 tons will be rolled by the Colorado Fuel & Iron Co., 18,000 by the Illinois Steel Co., 12,000 tons by the Inland Steel Co., and 4000 tons by the Bethlehem Steel Co. The company will also buy 30,000 tons of track fixtures.

Recent car inquiries noted in the market include 100 fifty-ton gondola cars of composite construction for the Atlanta & West Point Route, 6 passenger cars for the Central of Georgia Railway, and 4 passenger cars and 2 baggage cars for the Gulf, Mobile & Northern Railroad.

Orders for Motor Cars.

The Edwards Railway Motor Car Co., of Sanford, N. C., has received an order from the Black Star Coal Co., of Louisville, Ky., for a 30-passenger motor car with a large baggage compartment and a 34-passenger trailer. The same builders have also received an order for a motor car for the Tennessee, Kentucky & Northern Railroad.

TEXTILE

WILL BUILD \$2,000,000 BLEACHERY NEAR ASHEVILLE.

New England Firm Preparing for Large Operations South—Purchases 200-Acre Site.

Asheville, N. C., December 17—[Special]—Plans for the construction of a \$2,000,000 bleachery near Asheville are being made by the Sayles Finishing Plants, Inc. of Saylesville and other points in Rhode Island. The company has purchased a site of 200 acres on the Swannanoa River, about four miles from Asheville, as a site for the plant. J. E. Sirrine & Co., of Greenville, S. C., are preparing plans and specifications for the bleachery, although definite details covering the types of building and dimensions have not been determined.

Operations of the plant are intended to cover all processes of bleaching and finishing cotton and silk goods complete, the mill to be so constructed that additional units may be built later. In addition to the mill proper, plans of the company include the establishment of a modern mill village, the construction of highways and walks, lakes, parks, playgrounds and other features.

It is stated that a survey has been made for building a spur track to the site from the main line of the Southern Railway, about a mile above Biltmore. Approximately 400 operatives will be employed at the mill. The site was acquired for the company by the Swannanoa Bend Realty Co., which has been organized by Heywood Parker, Richard Loughran and S. L. Forbest as a holding company.

Officers of the Sayles Finishing Plants, Inc. include Charles O. Read, president; Kenneth F. Wood, first vice president and treasurer; J. W. Manley, second vice president, and Ethelbert Harman, secretary and treasurer.

New England Company Buys Southern Plant—\$350,000 Investment in Buildings and Machinery.

Greenville, S. C.—The plant formerly operated here by Cyclone Motors, Inc., now defunct, has been purchased by the Shambow Shuttle Co. of Woonsocket, R. I., for a consideration of \$75,000. The purchasing company, which has operated a small plant in Greenville for about a year, announces that large purchases of machinery for the new plant have been made in England.

The building acquired measures 100 by 270 feet, and to this the company will add a warehouse 36 by 120 feet. Buildings and machinery will represent an investment of \$350,000.

Officers of the Shambow Shuttle Co. include J. C. Shambow, president; H. H. Ullman, vice president and general manager, and M. J. Offeres, secretary and assistant treasurer. Eber Robinson of England will be the production manager of the Greenville plant.

Carthage Hosiery Mills to Organize.

Carthage, Mo.—Preliminary plans are being worked out for organizing the Carthage Hosiery Mills here, according to an announcement of H. L. Marks, chairman of the industrial committee of the Chamber of Commerce. The company will be capitalized at \$50,000, of which P. F. Vogel of St. Louis, who is to head the company, will take \$10,000 worth of stock. Of the remaining \$40,000, one-half is to be subscribed locally and \$20,000 is to be held in the treasury, one-half to go to Mr. Vogel as a bonus when the plant is operating on a paying basis.

Revolutionary Textile Process for Ford Cotton Mill at Detroit.

Lockwood, Greene & Co., Boston, Mass., are making the plans for the cotton mill to be built by Henry Ford at Detroit. The MANUFACTURERS RECORD takes from a description of the plant by Kenneth Moller, Director, which appears in "Builders," a monthly publication issued by Lockwood, Greene & Co., the following:

"The Ford Motor Co.," says Mr. Moller, "have commissioned Lockwood, Greene & Co. to lay out in the Aviation Building at Detroit, the first unit of a mill to make the cloth used as backing for artificial leather for seats and tops in Ford cars. About 50,000 square feet of space will be devoted for carding, spinning, weaving and dyeing. The cotton will be stored and opened in another building. The mill will contain roughly 7600 spinning spindles and about 200 looms together with preparatory and finishing machinery and a dyehouse. Capacity on a day run of 48 hours a week will be about 29,000 pounds; running three shifts the mill will produce about 87,000 pounds a week. The cloth is to be a 53 inch sateen running 1.05 yard to the pound and made of 13s warp and 9s filling yarns. Much experimental work remains to be done before final methods and machinery are decided upon. The idea is to make the plant as nearly continuous and automatic as possible, provided there is accomplished saving of labor and reduction in cost of manufacture. Everything now points to a process as follows:

"Raw cotton will go first to a bale breaker, next through two vertical openers set in tandem, and then directly to the cards. Each of these machines will be fed automatically from the preceding machine and the cards will deliver the stock directly to the back of the drawing frames and thence to the slubbers. Up to this point there are two radical departures from common practice; first, the elimination of picking; second, the avoidance of handling the cotton by human hands after it enters the bale breaker. After one process of drawing the cotton will pass through a slubber, one process of roving, spinning, spooling, warping, slashing and weaving, the latter on automatic looms. After inspection the cloth will be singed, desized, washed, dried, dyed, dried again and tentered. It will then be ready for the coating. Automatic conveyors will be used throughout the plant. Wherever possible two processes will be put together; for instance the singeing and desizing processes will be so coupled, also the washing and the first drying processes. The revolutionary character of the Ford process is apparent. All of us who have had a hand in this work look upon it as a singular opportunity to render a distinct contribution to the advancement of the textile industry."

Contract for Hannah Pickett Mill No. 2.

Rockingham, N. C.—Contract has been awarded by the Hannah Pickett Mills to T. C. Thompson & Bros., Charlotte and Birmingham, for building its proposed new mill No. 2 here. The building will be 250 by 390 feet and will accommodate 25,000 spindles and 800 looms. About 250 operatives will be employed.

Mill No. 1 of this company is equipped with 45,840 ring spindles and 1008 wide looms. Its product is wide print cloth.

Officers of the Hannah Pickett Mills include R. L. Steele, president; W. B. Cole, treasurer; M. B. Leath, secretary, and J. W. Jenkins, superintendent and buyer.

New England Southern Cotton Mill Merger.

Boston, Mass.—Stockholders of the International Cotton Mills have voted to ratify the consolidation of various New England, Canadian and Southern cotton mills into one organization to be known as the New England Southern Mills,

bringing into the combination a total of 362,000 spindles. Preliminary details have been previously published in the MANUFACTURERS RECORD.

It is announced that the only new financing in connection with the consolidation will be the issuance of \$4,000,000 ten-year 7 per cent bonds.

Contract for Seven Buildings to Cost \$1,000,000—Plant to Produce Artificial Silk.

The American Cellulose & Chemical Manufacturing Co., Ltd., of New York, wires the MANUFACTURERS RECORD that it has awarded contract to the Austin Co., of Philadelphia for a number of the buildings required for its proposed plant at Amcelle, near Cumberland, Md. The contract covers seven buildings to cost about \$1,000,000, and work has already started. They will be of steel and brick, two stories high, and will contain an approximate total of 260,000 square feet of floor space.

The plant is being erected for the production of artificial silk.

Tennessee Textile Mills.

Alton Park, Tenn., December 15—[Special]—G. B. Smith, formerly general superintendent of the United Hosiery Mills Corporation, has become manager of the Tennessee Textile Mills here. These latter have been operating under that name for nearly eight years, the present being merely a reorganizing movement, in which no expansion program will now be considered.

The machinery of the plant is electrically driven, employing 140 operatives and producing 1000 dozen pairs of misses' hosiery daily. J. W. Cummings is president of the company.

The Raw Material for Alumina Cements.

Discussing the article by Mr. E. C. Eckel, in a recent issue of the MANUFACTURERS RECORD, on "The New Aluminum Cements," Mr. Peter Zechini, president of the Italian Blue Gem Coal Corporation, Jellico, Tenn., writes:

"We are very much interested in this article, because in order to manufacture first class cement it requires clay containing a large amount of alumina.

"Here in the mountains around Jellico we have billions of tons of clay containing alumina. The analyses of this clay show that this clay contains from 33 to 40 per cent alumina. We have mountains of limestone, enough to supply the United States with the best of cement. The limestone has been uplifted by nature and is now accessible to the railroad.

"Once this range of mountains of alumina clay and limestone becomes developed there will be enough cement of the finest quality to furnish the South for modern construction."

On Calcium Arsenate and the Boll Weevil.

Howard W. Ambruster, 261 Broadway, New York, has published in pamphlet form a number of articles and addresses which he has written and prepared concerning the use of calcium arsenate to rid the cotton fields of the boll weevil. The pamphlet includes two articles that appeared in the MANUFACTURERS RECORD. In his introduction Mr. Ambruster says that the solution of the problem as a whole will only come when a systematic and comprehensive plan is put into effect which will provide an abundant supply of poison in warehouses in every cotton growing county in the South, to be sold at a price which the planter is able and willing to pay.

GOOD ROADS AND STREETS

WEST VIRGINIA OPENS BIDS FOR WORK TO COST \$3,500,000.

Projects Involve 122 Miles of Road—Also Bridges.

Charleston, W. Va.—Bids have been opened here by the West Virginia State Road Commission for the construction of about 55 miles of roads in various counties of the State, together with a number of bridges, the total cost to approximate \$2,000,000. These projects, with the lowest bidder on each, include the following:

Two-tenths of a mile of grading, draining and paving with concrete in Wetzel County, Pipes & Johnson, Middlebourne, W. Va., lowest bidders at \$5865; 10.8 miles of grading and draining in Webster County, Waugh & Langley, Bluefield, W. Va., at \$281,430; 8.15 miles of bituminous macadam in Fayette County, Sutton Construction Co., Ashland, Ky., \$299,152; four-tenths mile grading, draining and bituminous macadam paving in the same county, Waugh Bros., Fayetteville, W. Va., \$29,722; 5 miles of bituminous macadam in Greenbrier County, Ebers-Bak Construction Co., Pomeroy, Ohio, \$172,860.

For 5 miles of grading and draining in Preston County, F. H. Yeader & Son, Smithfield, W. Va., are lowest bidders at \$52,708; 6 miles of grading and draining in Preston County, L. J. Chandler, Moorefield, W. Va., \$89,708; 1.5 miles of grading, draining and bituminous macadam paving in Barbour County, F. H. Yeader & Son; 9.8 miles of grading and draining in Wayne County, C. E. Price, Huntington, W. Va., \$171,031; section of 4 miles in Wood County and one of 3 miles in Ritchie County, both to consist of grading, draining and paving with concrete, Vinton Law & Son, Cairo, W. Va., \$396,525, and for 1 mile of grading and draining in Calhoun County, Hardman & Minns, Spencer, W. Va., at \$30,720.

Bridges are as follows: Three over Ralston Run in Randolph County, of the concrete girder type, with 40-foot spans each, Frank Hanna, Elkins, W. Va., lowest bidder at \$11,656; Leading Creek bridge in Randolph County, concrete arch with two 60-foot spans, Edwin Starcher, Buckhannon, W. Va., \$19,158; Cedar Creek bridge, Gilmer County, masonry sub-structure and 140-foot span steel through truss, Oregonia Bridge Co., Lebanon, Ohio, at \$12,580 for superstructure, and J. C. Schrake, Webster Springs, W. Va., at \$17,253 for sub-structure, and the Klines Gap bridge in Grant County, three 20-foot concrete slabs, Major Construction Co., Front Royal, Va., \$6916.

For Denver bridge in Marshall County, 150-foot steel superstructure only, Standard Engineering & Contracting Co., Toledo, Ohio, is lowest bidder at \$14,133; Abrams Creek bridge, Grant County, 80-foot pony truss, superstructure only, Ferris Bridge Co., Cumberland, Md., \$6828; Stone Coal bridge, Wayne County, steel pony truss, 85-foot span, superstructure only, Vincennes Bridge Co., Vincennes, Ind., \$6,595; Brassy Creek bridge, concrete arch with two 50-foot spans, and Holly River bridge, concrete arch with 80-foot span, both in Webster County, Faris Construction Co., Sutton, W. Va., \$23,171. F. N. Anderson of Baltimore is the lowest bidder at \$60,751 for building the Scheidler bridge, of concrete through girder type, with 35-foot span, together with four other concrete bridges, with 80-foot spans each, all in Wetzel County.

Since the above information was received the West Virginia State Road Commission has opened bids for 11 additional projects, completing the total of 31, for which \$3,500,000 will be expended. The last 11 projects total 67 miles and will cost over \$1,500,000 for construction. These roads, with the lowest bidder on each, are as follows:

For 8.14 miles of concrete paving in Doddridge County,

H. F. Hallanan & Son, Fairmont, W. Va., are lowest bidders at \$268,961; 5 miles of grading and draining in Hampshire County, Chandler & Armstrong, Moorefield, W. Va., \$96,960; 6.5 miles of grading and draining in Lewis County, Branham & Edwards, Clarksburg, W. Va., \$61,486; 6 miles of grading and draining in Logan County, Eccles Construction Co., Marlinton, W. Va., \$89,834; 8 miles of grading, draining and bituminous macadam paving in Monongalia County, Ebers-Bak Construction Co., Pomeroy, Ohio, \$373,651; 10 miles of grading and draining in Monroe County, J. J. Battershill & Son, Charlottesville, Va., \$81,232; 2.1 miles of bituminous macadam paving in Pocahontas County, Eccles Construction Co., \$60,040, and for 4.2 miles of the same class of paving in the same county, Battershill, Goode & Co., Charlottesville, are lowest bidders at \$106,252.

For 5 miles of grading and draining in Preston County, H. H. Bruppy, Webster Springs, W. Va., is lowest bidder at \$53,760; 5.6 miles of grading, draining and bituminous macadam paving in the same county, Dominick Rich, Weston, W. Va., \$227,756, and for 7 miles of grading and draining in Taylor County, the Eccles Construction Co., at \$93,486.

Paving Brick Manufacturers Meet.

The fifth annual meeting of the Eastern Paving Brick Manufacturers Association was held December 11 at the Pennsylvania Hotel, New York City. Reports of the officers and committees were read and approved and the following officers re-elected for the ensuing year: President, R. L. Winslow; treasurer, R. T. Hutchins; secretary and engineer, Wm. C. Perkins. These are the same officers that have governed the association for the past five years.

The yardage shipped in the past year, 1,502,604 square yards, was the largest shipment in any one year since the formation of the association, it was announced.

Resolutions on the death of President Harding were adopted, also resolutions commending President Coolidge and Secretary Mellon on their tax reduction program; also commending the railroads for the efficient manner in which they have handled freight during the past year.

Contract Let for \$563,000 Bridge.

Pensacola, Fla., December 17—[Special]—The road building program of West Florida has been increased by the award of contract for a \$563,000 bridge between Escambia and Santa Rosa counties, a short distance from Pensacola, reference to which was made last week in the MANUFACTURERS RECORD.

The work will be carried out by these counties with state and federal aid. Contract was let to the Hardaway Contracting Co., of Columbus, Ga., and calls for completion within one year. A fill 12,385 feet in length is included.

There will be a trestle 5585 feet long. In addition, a steel bridge 500 feet long and an 80-foot span are necessary to the completion of the project. Contract for these two items has not yet been let.

To Build Seven Miles in Beaufort County.

Beaufort, S. C.—Bids will be received until December 27 at the courthouse in this city for the construction of 7.025 miles of State road No. 1 in Beaufort County, beginning at the Beaufort-Jasper county line at the end of project No. 199 in Jasper County and extending through Hardeeville to the Jasper-Beaufort county line at the beginning of project No. 201 in Jasper County.

Plans, specifications and proposal forms are on file at the office of W. C. Cathey, division engineer, Orangeburg, and at the office of the state highway engineer at Columbia.

Saving a Concrete Road.

A method of resurfacing concrete roads which have become worn by constant and heavy traffic, and which may claim the attention of engineers, is described as follows by A. D. Stivers, engineer of the Asphalt Sales Department of the Texas Co., New York:

"In 1918 the road from Humble to Moonshine Hill in the heart of the Humble Oil Field, Texas, was paved with concrete. This road is subjected to the usual heavy oil field traffic and by the summer of 1920 showed such rapid wear that the county commissioners decided that it was necessary to resurface the road immediately. Sufficient funds to apply a 2 inch hot mix bituminous surface were not available and it was necessary to lay something cheaper. Inverted penetration using trap rock and Texaco No. 250 asphalt was selected. The road was swept clean and $\frac{1}{2}$ gallon of asphalt per square yard was applied with a pressure distributor.

The asphalt used is a very soft grade, having a penetration of 250 to 300 at 77 degrees Fahrenheit. It adheres to concrete perfectly, especially when the surface has been roughened by traffic. The asphalt, while still hot, was covered with trap rock 1-inch to $\frac{1}{4}$ inch in size, a cubic yard of stone covering approximately forty-five square yards. The surface was then rolled lightly to set the stone in the asphalt and immediately open to traffic.

"The road has been subjected to very heavy traffic for three years since this surfacing was applied and now is in excellent condition. The accompanying photograph was taken three years after the completion of the surfacing and shows clearly the present condition of the road. Surfacing has adhered to the concrete perfectly and there has been no sign of shoving, rolling or rutting. This method of resurfacing a concrete road is recommended where sufficient funds for laying a hot mix bituminous surface are not available."



WORN CONCRETE PAVEMENT ON HUMBLE-MOONSHINE HILL ROAD RESURFACED WITH INVERTED PENETRATION MACADAM.

Kentucky Opens Bids for 25 Miles of Road.

Frankfort, Ky., December 15—[Special]—Bids have been opened here by the Kentucky State Highway Commission for road projects totaling 25 miles, and one bridge, the lowest bids aggregating \$483,338. The projects with the bidders include the following: About 2 miles of waterbound macadam in Hart County, Tevman & Hanaley, of Hodgenville, Ky., at \$52,147; F. G. Breslin, of Louisville, at \$3300 for surface treatment; 11 miles of gravel surfacing in Larue County, Ellis & Smeathers, Owensboro, Ky., at \$232,885, and Atlantic Refining & Asphalt Co., Atlanta, at \$15,775 for oil surface treatment.

For 10.7 miles of waterbound macadam resurfacing in Harrison County. Ben W. Gorham, Lexington, Ky., is lowest bidder at \$66,794, and for 1.6 miles of waterbound macadam in Garrard and Boyle counties, the Bates Paynter Co., of Danville, Ky., at \$34,396; the Southern Oil & Tar Co., Louisville, bid \$2321 for oil surfacing on the latter road.

L. E. Myers, of Chicago, is the lowest bidder at \$31,321 for the construction of the sub-structure and the Kentucky Hydro Electric Co., Louisville, at \$44,250, for the super-structure of a bridge over Dix River on the Nicholasville-Danville road in Garrard and Boyle counties. This bridge will have one 240-foot and two 150-foot steel spans.

LUMBER AND BUILDING MATERIALS

Lumber Shipments Decline.

Washington, December 13—An increase in production and a decrease in shipments and orders (new business) for the week ending December 8 is indicated in reports received by the National Lumber Manufacturers Association from 384 of the larger commercial sawmills of the country, as compared with reports from 377 mills of the preceding week. Production increased 6,454,806 feet, shipments decreased 25,610,387 feet, and orders decreased 10,150,798 feet. The 130 reporting mills of the West Coast Lumbermen's Association and the 135 reporting mills of the Southern Pine Association show an increase in unfilled orders on hand from 635,400,091 feet of the preceding week to 653,735,489 feet for the week ending December 8.

For all mills of the seven reporting associations, shipments were 80 per cent and orders 90 per cent of production. For Southern Pine Association mills these percentages were 84 and 99, and for the West Coast mills 75 and 86. Most of the mills have a normal production for the week, according to which actual production was 105 per cent, shipments 81 per cent and orders 93 per cent.

The following table compares the lumber movement for the three weeks indicated:

	Past Week	Corresponding Week 1922	Preceding Week 1923 (Revised)
Mills	384	377	377
Production	234,777,151	207,177,046	228,322,345
Shipments	187,479,846	211,367,984	213,090,233
Orders	212,361,695	209,666,470	222,512,493

Reports received this week from 14 of the California pine mills, representing 38 per cent of the total cut in the California pine region, give their production as 7,921,000 feet, shipment 10,111,000 feet and orders 9,793,000 feet.

Compared with like period of 1922, the lumber movement for the first 49 weeks of 1923 is as follows:

	Production	Shipments	Orders
1923	11,732,481,550	11,557,584,951	11,036,368,828
1922	10,359,557,666	9,884,442,942	10,171,887,291
1923 Increase ...	1,372,923,884	1,673,142,009	864,481,537

The West Coast Lumbermen's Association wires from Seattle that production for last week was 109,470,313 feet,

sales 94,602,555 feet and shipments 81,695,201 feet. Production for reporting mills was 25 per cent above normal, new business was 14 per cent below production and shipments were 14 per cent below new business.

The Northern Pine Manufacturers Association wires from Minneapolis that of 10 mills reporting for the week, only 4 are now sawing.

Standards Fixed by Lumber Industry.

Representatives of the various elements of the lumber industry and trade in conference with Secretary Hoover last week, meeting in Washington, agreed as to standard sizes and dimensions of lumber. Production schedules will accordingly be reduced from 26 to 12 sizes, and the thickness of dressed boards was standardized at 25-32 of an inch with 26-32 of an inch as extra standard.

Other recommendations of the Central Committee on Lumber Standards of which John W. Blodgett, president of the National Lumber Manufacturers Association, is chairman, were adopted with minor changes, and the committee was instructed to proceed with the consideration of short and odd lengths, rough-dry sizes, box lumber, mouldings and other subjects and report at another conference to be held in May, 1924.

In addition to the adoption of the inch board standards the following recommendations were approved: That the terms standard board and extra standard board, and standard dimension and extra standard dimension be adopted as designations for 1-inch boards (yard) and 2 - inch dimension (yard) and applying to both soft and hardwoods; that 1½ inches S1S or S2S be adopted as the thickness for standard dimension not more than 12 inches wide; 1¾ inches, S1S or S2S for extra standard dimensions; that the finished width of boards, dimension and finish S1E or S2E be 3-8-inch off on lumber widths less than 8 inches, and ½-inch on lumber of widths of 8 inches and over.

The joint committee which submitted the recommendations consisted of W. T. Murray, Southern Pine Association, New Orleans, La.; Edward Hines, Northern Pine Manufacturers'

LUMBER MOVEMENT FOR FORTY-NINE WEEKS, AND FOR WEEK ENDING DECEMBER 8.

	Production		Shipments		Orders	
	1923	1922	1923	1922	1923	1922
Southern Pine Association:						
Total	3,826,008,848	3,636,827,029	3,859,820,040	3,525,837,299	3,673,711,973	3,691,701,710
Week (135 mills)	76,490,150	73,575,016	64,300,032	74,992,160	76,000,461	79,916,344
West Coast Lumbermen's Ass'n:						
Total	5,002,495,875	4,188,687,416	5,104,245,017	3,847,858,512	4,991,214,559	3,941,377,511
Week (130 mills)	109,470,313	93,680,268	81,695,201	92,430,681	94,602,555	84,052,293
Western Pine Mfrs. Ass'n:						
Total	1,403,810,000	1,164,980,000	1,203,896,000	1,143,245,000	1,128,725,000	1,177,700,000
Week (34 mills)	24,986,000	16,987,000	17,848,000	18,175,000	20,025,000	17,500,000
California Redwood Association:						
Total	469,789,000	394,873,000	437,044,000	346,630,000	421,076,000	369,225,000
Week (14 mills)	9,845,000	10,742,000	5,744,000	8,097,000	5,577,000	8,762,000
North Carolina Pine Association:						
Total	425,495,227	469,986,843	436,047,394	478,175,027	348,018,296	471,466,070
Week (44 mills)	7,511,388	8,085,762	7,062,813	7,360,969	7,058,679	9,482,833
Northern Hemlock & Hardwood:						
(Softwood) Total	119,023,000	98,090,000	119,412,000	137,758,000	102,765,000	124,185,000
Week (17 mills)	1,007,000	1,371,000	1,155,000	1,874,000	1,340,000	1,508,000
Northern Pine Mfrs. Association:						
Total	485,859,600	406,113,378	397,120,500	404,939,104	370,228,000	396,232,000
Week (10 mills)	3,954,300	2,736,000	7,117,800	8,438,174	5,563,000	8,445,000
General Total for 49 weeks:						
(Softwood)	11,732,481,550	10,359,557,666	11,557,584,951	9,884,442,942	11,036,368,828	10,171,887,291
Northern Hemlock & Hardwood:						
Hardwood (49 weeks)	125,279,000	.....	154,562,000	.....	137,426,000	.....
Calif. White & Sugar Pine Mfrs.:						
(49 weeks)	1,154,420,000	.....	692,736,000	.....	.....	.....
General Total for Week	234,777,151	207,177,046	187,479,846	211,367,984	212,361,695	209,666,470

California White and Sugar Pine reports not included in totals, because "orders" not reported.

Association; A. C. Dixon, West Coast Lumbermen's Association; John H. Kirby, Southern Pine Association; H. C. Hornby, Northern Pine Manufacturers Association; William C. Reid, New York Lumber Trade Association; Thomas Gray, Ohio Retail Lumber Dealers Association; L. P. Lewin, of the same association; Fred H. Ludwig, Pennsylvania Retail Lumber Dealers Association, and J. Albert Mahlstadt, Northeastern Retail Lumber Dealers Association.

Lumber Manufacturers Favor Present Transportation Act—Resolution of John H. Kirby Adopted.

At the standardization conference last week in Washington of the twelve regional lumber manufacturing associations which constitute the National Lumber Manufacturers Association, advantage was taken of this gathering for a meeting of the directors to transact other association business.

On motion of John H. Kirby, representing the Southern Pine Association, a resolution was adopted in defense of the present national transportation act as follows:

"Whereas, lumber, even more than agricultural products, is manufactured at points far distant from principal consuming centers.

"The average lumber haul is nearly 800 miles and is constantly increasing. Ninety per cent of lumber is shipped by rail. The lumber industry, therefore, as much as other products, has been specially burdened by the increases in freight rates.

"As the standing timber supply declines and sources of lumber production become more remote, the uninterrupted operation of the industry is necessary to maintain throughout the country a lumber supply adequate to public needs.

"This cannot be accomplished without regular and dependable car supply. Government operation of the railroads failed to give the country efficient service. Restrictive railroad legislation has resulted not in better service or in lower rates, but in financial and physical impoverishment of railway transportation.

"During the past year the railroads operating under the present law have furnished the lumber industry with the most satisfactory transportation service in its history. This has resulted from the improved physical and financial condition of the railroads.

"The lumber industry is opposed to further legislative experimentation with the railroad service; to any action that will unnecessarily impair the credit of the railroads, or that will hinder or discourage the effort of the railroads to develop for all American commerce prompt and reliable transportation service at reasonable rates."

Another resolution unanimously adopted highly commended Secretary Mellon's tax reduction program, and the president and the secretary of the National Association were instructed to transmit this resolution to Mr. Mellon together with a letter of appreciation.

The directors and others who attended the meeting were as follows:

O. O. Axley, Warren, Ark.; H. C. Hornby, Cloquet, Minn.; C. A. Bigelow, Bay City, Mich.; J. W. Blodgett, Grand Rapids, Mich.; Junius H. Browne, New York; Guy I. Buell, Spring Hope, N. C.; R. E. Danaher, Detroit, Mich.; A. C. Dixon, Eugene, Ore.; Ernest Dolge, Tacoma, Wash.; J. J. Donovan, Bellingham, Wash.; I. H. Fetty, Savannah, Ga.; R. B. Goodman, Marinette, Wis.; H. B. Hewes, Jeanerette, La.; Edward Hines, Chicago; F. B. Hubbard, Centralia, Wash.; John H. Kirby, Houston, Tex.; F. C. Knapp, Portland, Ore.; A. L. Osborn, Oshkosh, Wis.; W. M. Ritter, Columbus, O.; W. L. Saunders, Cadillac, Mich.; W. C. Sherman, Millville, Fla.; C. H. Sherrill, New Orleans; Huntington Taylor, Coeur d'Alene, Idaho; Frederick Weyerhaeuser, St. Paul; R. W. Vinnedge, North Bend, Wash.; J. E. Jones, New Orleans; W. C. Berckes, New Orleans; Charles Hill, New York; R. B. Allen, Seattle; A. W. Cooper, Portland, Ore.; Ralph J. Hines, Jr., Chicago; J. M. Pritchard, Chicago; F. S. Spruill, Rocky Mount, N. C.; Wilson Compton, Washington, D. C.; Edgar P. Allen, Washington, D. C.; Geo. A. Houston, Kansas City; E. L. Carpenter, Minneapolis.

Report on Southern Pine.

The Southern Pine Association for the week ended December 7 reports as follows on 135 mills:

	Cars	Feet
Orders on hand beginning of week	10,552	220,863,912
Orders received during week	3,631	76,000,461
Total	14,183	296,864,373
Shipments during week	3,072	64,300,032
Orders on hand end of week	11,111	232,564,341

Production for the week was 76,490,150 feet. Shipments were 12,190,118 feet below production or 15.94 per cent. Orders were 489,689 feet or 0.64 per cent. Orders were 18.20 per cent or 11,700,429 feet above shipments. The week was 9,093,948 feet or 10.63 per cent below normal production and orders 11.20 per cent or 9,583,637 feet below normal production. The increase in orders on hand amounted to 11,700,429 feet or 5.30 per cent.

Week's Orders Largest in Three Months.

The North Carolina Pine Association reports as follows on 48 mills for the week ending December 8:

	Total Feet
Orders	8,373,740
Shipments	8,532,170
Production	9,449,004
Normal production	13,152,000

The orders were one per cent below shipments, 11 per cent below actual production and 36 per cent below normal production. Actual production was 29 per cent below normal. There is an increase in orders over the preceding week of 4,684,781 feet or 127 per cent, and the total is the largest since the week of September 22.

Government Buys 50,000 Acres in Wet Virginia for Reforestation—Owns 50,000 Acres in State.

Martinsburg, W. Va.—The United States Government has acquired a third tract of 50,000 acres of cut-over land in Pendleton and Randolph counties in this state for reforestation purposes. With this purchase, which was made at \$2.75 per acre, the government owns 150,000 acres in West Virginia, and plans to purchase a 100,000 acres additional. Most of the land is located in Greenbrier, Pendleton, Randolph, Tucker, Grant and Hardy counties, with small tracts in a number of other counties.

Mississippi Retail Lumber Dealers' Association.

Jackson, Miss.—At a recent meeting here of retail lumbermen of the state the Mississippi Retail Lumber Dealers' Association was organized with the following officers: B. M. Fulton, president; E. O'Brien, Sr., vice president, and E. R. E. Knight, treasurer, all of Jackson. A secretary will be chosen by the board of directors, which is composed of W. F. Robinson, Meridian; J. D. Webb, Greenwood; H. G. Barber, Biloxi; M. E. Leake, Tupelo, and V. L. Virden, of Greenville.

The railroads of the country consume between 9,000,000,000 and 10,000,000,000 feet of forest products each year, or about 25 per cent of the total lumber production, including 6,000,000,000 feet of railroad ties and 3,500,000,000 feet of lumber, timber, bridge and switch ties and material, according to a recent report by Rodney E. Browne, Director of the Market Research Department of the Southern Pine Association of New Orleans.

The Texas Company has ordered 10 tank cars of 6000 gallons capacity from the General American Tank Car Corporation.

MECHANICAL

Large New Oil Engine of All American Design.

A party of New York shipping men recently visited the works of the Bethlehem Steel Company at Bethlehem, Pa., to see the new fuel oil internal combustion engine which it has developed for both land and marine service and which is described as being far superior to the older types of Diesel engines, both as to operation and efficiency. Tests of the new engine have been in progress for a year or more and it was only recently that it was placed on the market. Officers of shipbuilding companies, oil companies, steamship companies, and others interested in the new motive power saw the machine in operation.

This new development is a large unit type oil engine of the vertical, two stroke cycle, single acting type, constructed in units of four, six, or eight cylinders, running at a speed of from 116 revolutions per minute for land power purposes down to 90 revolutions per minute for marine power installations, and it is stated that the number of power impulses given to the crank shaft per revolution is equal to the number of cylinders, thus giving a more even turning torque than would a four stroke cycle engine, in which the number of power impulses is equal to one half the number of cylinders. This even torque of the two stroke cycle type, it is further observed, makes the engine very steady in operation, as is shown by a six cylinder engine, without flywheel, that is in regular operation in the company's Bethlehem power station producing alternating current in parallel with 40,000 horsepower of gas engines.

"This regularity of turning torque," the company says further, "has particular advantages in a marine installation, in that it permits a reduction in the size of the line, thrust and propeller shafts. In the conversion of ships from steam to oil engine drive, a matter of utmost importance to our merchant marine, costs are reduced because the Bethlehem engine can be installed in most cases without having to increase, and therefore renew, the line, thrust and propeller shafts already in the ship. * * * *

"Power is produced by the combustion of liquid fuel delivered into the cylinders in a highly atomized state by the aid of compressed air. The combustion cycle is of the full Diesel type. The cylinder air charge is compressed to such a pressure that the heat of the air is sufficient to ignite the atomized fuel when sprayed into the cylinder. * * * *

"In an effort to produce the best possible design," says the company, "our engineers visited Europe to inspect engines of all the makes developed there. A careful study of these engines and a comparison of the manufacturing and operating conditions in Europe with those in America forced us to conclude that we could produce a much superior engine by developing our own design."

It should be further noted that this new engine of American design throughout, is made after years of experience on the part of its builders who also say, "The manufacture of steel is one of the most exacting of all industries as regards power supply. For that reason the company has for years designed most of its gas units of large power. Over 200,000 horse power of gas engines have been designed by our engineers and built under their supervision in our plants. A number of these have been operating from ten to fourteen years under the hardest possible conditions of continuous steel mill service. We are therefore, not only designers and builders, but in addition have for years been users of a great number of large internal combustion engines, mostly of 5500 horse power each. This long experience in designing, building and operating large engines enables us to produce units having a remarkable degree of reliability and economy."

It is further stated that a thirty days continuous endurance run was made with the six cylinder engine used to generate alternating current. The engine functioned perfectly and was found to be in excellent condition after the test, during which it made more than 5,000,000 revolutions and used 849,829 pounds, (about 425 tons) of ordinary plant fuel oil varying from 22 to 30 degrees Beaume with high sulphur content. Other proportionately economical results were recorded for the use of lubricating oils and greases. The equivalent sea mileage of the total revolutions was 8700 miles. There were 1,211,900 kilowatt hours of electricity produced.

Gasoline Electric Shovel With Three Motors.

A gasoline-electric shovel that is reported meeting with decided success, which embodies the idea of three separate motors, and which was designed and built by the Marion Steam Shovel Co., Marion, Ohio, is here shown at work on a difficult job. The company has built both the friction type and the three separate motors type of shovel and has abandoned the friction type, it is stated, because of many costly and unnecessary evils attending its operation. Owners and operators in all industries, it is observed, are endorsing the



SHOVEL AT WORK ON A HARD JOB.

Marion idea of three separate motors, one for the crowding motion of the shovel, one for the hoisting motion, and the other for the swinging motion.

This gasoline electric shovel, known as Marion Model 21, $\frac{3}{4}$ yard, has equipment consisting of a main gasoline-engine-driven generating set which maintains constant speed and power irrespective of the load on any or all parts of the operating mechanism. Current from this main set is supplied to the individual motors which control the three main motions of the machine. By using electrical transmission all power losses caused by mechanical transmission are avoided and current is paid out to the principal motions of the machine without any loss of energy. The motors, when completely overloaded, slow up and finally stall just as would a steam engine similarly overloaded.

It is stated that the power of the gasoline-electric shovel is rather better than the power of the equivalent size of steam shovel and its speed and handiness are many per cent greater. Its tractive possibilities are practically unlimited; it does not require a certificated operator; it is not necessary to have a fireman; it is controlled as easily as is a street car; and its fuel is gasoline, which is readily transported. Only one pailful of water daily is required to make up for evaporation losses and there is no danger of freezing in cold weather because the radiator can be quickly and easily drained. In addition to these advantages the machine possesses the merit of ability to operate in places which would be inaccessible and impracticable for any other type of shovel, and besides, when the engine stops all expense immediately ceases.

Construction Department

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained. Further facts about any incomplete or incorrect item reported in these columns are always appreciated.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$20.00 a year.

Bridges, Culverts and Viaducts

Fla., Clearwater—Pinellas County contemplates building bridge across Tarpon Bayou. Address Lieut.-Col. Gilbert A. Youngberg, U. S. Dist. Engr., Jacksonville.

Fla., Dade City—State Road Dept., Tallahassee, Fla., let contract for 26 culverts. Details under Road and Street Construction.

Fla., Lake Worth—Riddle Engineering Co. has plans for bridge with rainbow arch, to span South Lake Worth Inlet, \$125,000 bonds for which were voted. Address A. A. Atwater, Chmn., of Board of County Commrs.

Fla., Miami—Dade County Commrs. plans widening viaducts on causeway connecting Miami and Miami Beach; Hobart Crabtree, County Engr.

Fla., Miami—Venetian Islands Associated Companies, let contract to J. I. Conklin, to build Venetian Way viaduct, 2½ mi. across Biscayne Bay, connecting Miami with Miami Beach; crossing 4 of Venetian Islands and Belle Island.

Fla., Orlando—Orange County Board of Commrs. let contract to Austin Brothers Bridge Co., Dallas, Tex., to build steel bridge over St. John's River, connecting Orange and Brevard Counties; will also build approaches.

Fla., Sanford—City plans building Fortune St. Bridge; reported to vote Feb. 12 on \$200,000 bonds. Address City Commrs.

Fla., Seminole—Tampa Sand & Shell Co., Tampa, was awarded contract for approach to Seminole Bridge across Boca Ceiga Bay.

Fla., West Palm Beach—Palm Beach County will receive bids until Jan. 2 to furnish material and build steel draw bridge with suitable approaches, across East Coast Canal at Boynton, Fla.; plans, etc., from Chas. H. Holstlaw, County Engr.

Fla., West Palm Beach—Palm Beach County Commrs. receives bids until Dec. 19 to furnish material and build complete double leaf, deck plate girder, underneath counter weight, bascule draw span bridge, 2 deck plate girder approaches and necessary substructures, across West Palm Beach Canal, on Military Trail road; plans, etc., from Chas. H. Holstlaw, County Engr.

Ga., Hartsfield—Colquitt County plans expending \$60,000 to build concrete bridges and culverts; O. H. Lang, Consol. Engr., Moultrie, Ga.

Kentucky—State Highway Comn., Frankfort, Ky., will receive bids until Jan. 8 to build 2 bridges over Cumberland River on Harlan to Pineville road, Harlan County, State Project No. 6, Sec. C; 240-ft. and two 150-ft. steel spans; 230,000 lbs. structural steel; 2 reinforced concrete abutments; reinforced concrete pier; plans, etc., on file; Joe S. Boggs, State Highway Engr.

Ky., Danville—State Highway Comn.,

Frankfort, let contract to F. K. Keller Co., Chicago, Ill., at \$79,633.80 for bridge over Dix River on Nicholasville-Danville road; 240-ft. and two 150-ft. steel spans; State Project No. 25, Sec. B.

Louisiana—Louisiana Highway Comn., Raymond Bldg., Baton Rouge, La., will receive bids until Jan. 15 for 3 bridges as follows: Madison and Tensas Parishes, Federal Aid Project No. 134—Bayou Vidal Bridge on Tallulah-St. Joseph Highway; 60-ft. riveted pony truss span; concrete floor slab and 20-ft. reinforced concrete deck girder approach span on each end; Madison and Richland Parishes, Federal Aid Project No. 135, Sec. B—Bayou Macon Bridge on Tallulah-Monroe Highway; three 80-ft. riveted pony truss spans with concrete floor slab and four 36-ft. reinforced concrete deck girder approach spans; Lafayette Parish, Federal Aid Project No. 136, Sec. B—Bayou Vermillion Bridge, on Lafayette-Broussard Highway; 80-ft. riveted pony truss span with concrete floor slab and two 30-ft. reinforced concrete deck girder approach spans; plans, etc., on file; J. M. Fourmy, State Highway Engr.

Md., Baltimore—City, Howard W. Jackson, Mayor, contemplates building 1 mi. cross-town viaduct, from Franklin St. at St. Paul to connect with Monument St. at Forrest and Front Sts.; estimated cost \$2,500,000.

Md., Baltimore—Details under Road and Street Construction.

Miss., Jackson—Hinds County Board of Supvrs., will receive bids until Jan. 10 to build concrete bridge on Robinson St. public road, 5th Supvrs. Dist.; W. S. Wells, Chancery Clk.

Miss., Vicksburg—Warren County Board of Supvrs., are considering building swing bridge across Yazoo River at Haynes Bluff.

N. C., Kenansville—Duplin County is considering building 3 highway bridges over northwest branch of Cape Fear River, at Deep Branch, Chinquapin and Hallsville; O. O. Kuentz, Dist. Engr. Address County Commrs.

N. C., Winston-Salem—City receives bids until Dec. 20 to construct concrete bridges and culverts; plans, etc., from Harry L. Shaner, Commr. of Public Works.

Okla., Lamont—Grant County Commrs., Medford, will receive bids to build bridge across Salt Fork River; 7 spans, 96-ft. each; estimated cost \$90,000. Address County Engr. Hott.

S. C., Ware Shoals—Greenwood County Highway Comn., Greenwood, S. C., let contract to Palmer & Connard, Florence, S. C., at \$10,000, for 97-ft. reinforced concrete bridge over Southern Ry., at Ware Shoals, on road between Greenwood and Greenville.

Tex., Robert Lee—Coke County will receive bids until Jan. 3, for 237-ft. bridge over Oak Creek, on State Highway; 70-ft. steel span, with concrete approaches; J. E. Beavers, County Engr., Bronte, Tex.

Virginia—State Highway Comn., Richmond, Va., let contract for 2 bridges as follows: Alleghany County, Project S-189, Route 14, 326 ft. reinforced concrete bridge over Jackson's River near Clifton Forge, to Robert W. Curtis, at \$56,994.60; Nansemond County, Project S-149, Route 10, over Chuckatuck Creek, near Suffolk, to Battershill & Goode, Virgilina, Va., at \$8869.40.

West Virginia—State Road Comn., Charleston, received low bids for 17 bridge projects as follows: Randolph County, 2 sections; 3033, 3 bridges over Ralston Run, Nos. 864, 865, 866, concrete girder, 40-ft. spans each, Frank Hanna, Elkins, at \$11,656.15; 117, Leading Creek Bridge, No. 846, concrete arch, two 60-ft. spans, Edwin Starcher, Buckhannon, at \$19,158.05; 3111, Gilmer County, Cedar Creek Bridge, No. 842, masonry substructure, 140-ft. span steel through truss, superstructure; Oregonia Bridge Co., Lebanon, Ohio, at \$12,580, for superstructure, and J. C. Shraake, Webster Springs, at \$17,253.20 for substructure; 3146, Grant County, Klines Gap Bridge, No. 884, three 20-ft. concrete slabs, Major Construction Co., Ft. Royal, Va., at \$6916.50; 3176-B, Marshall County, Denver Bridge, No. 885, 150-ft. steel superstructure, Standard Engineering & Contracting Co., Toledo, Ohio, at \$14,133.

122, Grant County, Abrams Creek Bridge, No. 883, 80-ft. pony truss, superstructure, Ferris Bridge Co., Cumberland, Md., at \$6828; 3188, Wayne County, Stone Coal Bridge, No. 898, steel pony truss, 85-ft. span, superstructure, Vincennes Bridge Co., Vincennes, Ind., at \$6595; 3279, Webster County, Grassy Creek Bridge, No. 690, concrete arch, two 50-ft. spans; Holly River Bridge, No. 920, concrete arch, 80-ft. span; Paris Construction Co., Sutton, at \$23,171.55; 3162, Wetzel County, Schneider Bridge, No. 886, concrete through girder, 35-ft. span; Moore Bridge, No. 892; Wade Bridge, No. 893; Cook, No. 894, and Huff, No. 895; all 80-ft. spans; F. N. Anderson, Baltimore, Md., at \$60,751.

Advice from Charleston states all bids for both roads and bridges were rejected owing to failure to dispose of bonds.

W. Va., Fairmont—State Road Comn., Charleston, W. Va., received low bid from Concrete Steel Bridge Co., Clarksburg, W. Va., at \$5038 for 40-ft. span concrete deck girder, Annabelle Bridge, No. 842, Marion County.

Canning and Packing Plants

Mo., Koshkonong—Koshkonong Brandsville Fruit Shippers Assn. will rebuild burned packing shed.

Clayworking Plants

Md., Aberdeen—Puritan Brick Co., lately noted incorporated with \$225,000 capital by Geo. Hays Mitchell and others will erect plant with yearly capacity of 4,000,000 bricks.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

Coal Mines and Coke Ovens

Ala., Birmingham—Neill Coal Co., Inc., capital \$20,000, incorporated by John C. and H. C. Neill and others.

Ga., Savannah—James Imbrie, Imbrie & Co., Ltd., 61 Broadway, New York City reported to begin construction of briquetting plant within next sixty days, estimated cost \$1,000,000.

Tenn., Jellico—Jellico Blue Gem Coal Co., capital \$10,000, incorporated by John W. Foley, Clark Browning and others.

Va., Lynchburg—Imperial Coal Sales Co., capital \$250,000, incorporated by C. Lynch Christian, Pres.; H. P. Adams, V.-P.

West Virginia—Consolidation Coal Co., main offices, Baltimore, Md., and New York, has called special stockholders' meeting for Dec. 21 to vote on issuance of \$10,000,000 preferred stock.

W. Va., Ward—Kelley's Creek Colliery Co., increased capital from \$1,900,000 to \$2,000,000.

Concrete and Cement Plants

Ala., Birmingham—Dietz Concrete Construction Co., Inc., capital \$25,000, incorporated by J. F. Dietz, R. A. Skinner and others.

Cotton Compresses and Gins

Va., Blackstone—Blackstone Gin Corp., capital \$10,000, incorporated with E. G. Bagley, Pres., Kendrick, Va.; W. L. Barrow, Sec., Blackstone.

Drainage and Irrigation

Tex., Brownwood—P. A. Glanville, Pres. Chamber of Commerce plans irrigation project in Brown County; to build irrigation dam about 10 mi. north of Brownwood at "The Narrows," about 400 yds. below the confluence of Jim Ned Creek and the Pecan Bayou, dam to be 2000 ft. long, 150 ft. high at center, approximately 300 ft. thick at base, of concrete core and steel reinforcement and limestone, forming lake several miles in length, from $\frac{1}{2}$ to 1 mi. wide, more than 40 ft. deep, covering about 7000 acre feet; water shed to be more than 50 mi. in length; reclaiming about 40,000 acres land by irrigation; district to be formed and bonds voted for construction.

Electric Light and Power Plants

Ark., Little Rock—Arkansas Central Power Co., C. J. Griffith, Gen. Mgr., will expend \$150,000 in improvements to local plant; has begun the construction of addition to present

power building 106x25 ft., 1 story and basement; cost of equipment \$125,000; improvements will be completed in about 6 months.

Fla., Marianna—Marianna Light & Power Co., G. M. Thomas, managing official, will erect hydro-electric plant on the Chipola River; earth fill, concrete or masonry dam with spillway 150 ft.; 60 ft. power house; about 70 mi. of transmission line connecting Marianna, Blountstown, Altha, Cottondale, etc.; will develop 3000 h. p.; cost \$250,000; Southern Engineering Corp., Engrs., Albany, Ga.

Maryland—Potomac Public Service Co. of Hagerstown, Md., and Potomac Edison Co., Cumberland, Md., reported to have petitioned the Public Service Comsn. for permission to consolidate with capital of \$17,700,000, to serve with power virtually all of Western Maryland; Melville F. Riley, Hagerstown, Md., will be president of the combined companies; Sanderson & Porter of New York, will be in charge of operations; American Waterworks Co. of New York, will have charge of financing of enterprise; included in the combination will be the power plant at Williamsport, Pa., plants at Security, Md.; several hydro-electric and steam plants on the Potomac River and Shenandoah River in Virginia and West Virginia.

Md., Baltimore—United Light & Power Co., 101 E. Fayette St., incorporated by Geo. S. Newcomer, Douglas H. Rose and others.

Md., Baltimore—City, Wm. A. Parr Supt. of Lamps and Lighting, will remove the gas lamps on York Road, between 35th and 42nd Sts. and will replace with electric arc lamps; also plans removal of gas lamps from 33rd St. Blvd. and installation of electric lights on Boulevard and on Alameda.

Mo., Bolivar—Tri-Cities Power Co., lately noted incorporated with \$150,000 capital, Joe M. Diel, Sec., has let contract for construction of power house to cost \$40,000; will construct 28 miles of transmission system; develop 300 h. p.; Fairbank Morse Co., Machinery Contrs.; M. B. Messler, Ch. Engr.

N. C., Hayesville—Hayesville Power Co., capital \$125,000, re-organized with T. D. Dewese, Pres.

S. C., Duncan—Southern Power Co., Charlotte, N. C., have obtained options at Duncan near Spartanburg for installation of steam auxiliary plant as subsidiary power station for electric power development.

S. C., Spartanburg—Details under Land Developments.

W. Va., Charleston—Kanawha Valley Power Co., capital \$100,000, incorporated by J. E. Harsh, W. D. Payne and others.

Foundry and Machine Plants

Md., Baltimore—Holston Manufacturing Co., James B. Holton, Pres., 119 E. York St., has acquired plant of Unger & Hopf, is installing additional machinery; will establish machine shop, manufacture oil burners, etc. (Lately noted under Miscellaneous Enterprises as incorporated, capital \$10,000.)

Mo., St. Louis—Brock Engineering Corp., capital \$100,000, incorporated by Edward J. Brock, V. D. Sears and others; manufacture steam boilers, etc.

Tenn., Chattanooga—Frank Gebbie, of Rochester, N. Y., has acquired the R. R. Rabe interests and Dr. W. H. Chaney and Kenneth Gebbie purchased the Clifford Friar stock of the Rabe Pipe & Foundry Co. (lately noted as reported); Merle E. Drake also advises there will be a change in the personnel of the organization and the following officers probably elected: Frank Gebbie, Pres., Rochester, N. Y.; Earl J. Bellinger, V.-P., Sherman, N. Y.; Will Cummings, Treas. and Dr. W. H. Chaney, Sec.

Tenn., Chattanooga—International Harvester Co. will erect plant addition on Chester St.; plans have not been completed.

W. Va., Charleston—Ideal Manufacturing Co., incorporated by James W. Smiley, S. L. Walker and others; to manufacture mining machines.

Flour, Feed and Meal Mills

Tenn., Waynesboro—Farmers Grain & Milling Co., capital \$10,000, incorporated by D. J. Martin, J. F. Castell and others.

Tex., Lubbock—Fort Bros. of Dallas, Tex., acquired site and will erect flour mill.

Gas and Oil Enterprises

Ala., Mobile—Mobile Gas Co., R. I. Speer, local manager will expend \$35,000 in construction of 5 mi. of gas mains.

Ark., El Dorado—Harry Ezzell, Sharp Ezzell and associates have acquired 3755 acres of oil lands and will develop in wells and storage tanks.

Ky., Petroleum—Ampere Oil Co., capital \$20,000, incorporated by John William Turner, Petroleum; John Schuman, Evanston, Ill.

La., Rayville—City, is considering voting on \$90,000 bonds to build gas pipe line from Monroe gas fields for distance of 20 mi. to provide Rayville with gas for industrial and domestic use. (Lately noted as having surveys made.)

Md., Baltimore—Eastern Oil Corp., 20 E. Lexington St., incorporated by Leslie D. Swartwout, Geo. Eckhardt and others.

Md., Baltimore—Southern Gas & Power Corp., 101 E. Fayette St., incorporated by Douglas E. Rose, Leslie E. Mihm and others.

Miss., Holly Springs—Mid-Valley Petro-

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MANUFACTURERS RECORD

BALTIMORE, MD.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

leam Co. increased capital from \$10,000 to \$25,000.

Miss., Laurel—Laurel Oil & Supply Co., capital \$50,000, incorporated by J. H. McCown, J. W. H. Handley and others.

N. C., Kinston—Washington Gas Co., R. A. Blackwood, Pres., Scranton, Pa., lately noted having received gas franchise, will begin construction of gas plant in January; will expend \$100,000.

Okla., Enid—Magnolia Oil Co., of Dallas, Tex., reported to have acquired 200 acres oil lands.

Okla., Tulsa—Crusader Oil Co., capital \$10,000, incorporated by H. P. Lester, L. D. Chilton and others.

Okla., Wekoka—City votes Dec. 24 on granting gas franchise. Address The Mayor. S. C., Spartanburg—Details under Land Developments.

Tex., Dallas—Barrow Development Co., incorporated by John T. Barrow, A. T. Sibley and others.

Tex., Elliasville—Hanton Gasoline Co. has acquired the plant of the Central Gasoline Producing Co., with output of approximately 8000 gals. natural gasoline daily.

Tex., Laredo—Misko Refineries, Inc., increased capital from \$200,000 to \$250,000.

Tex., Mexia—Hogan-Freeman Co., capital \$15,000, incorporated by James T. Hogan, W. D. Freeman and others.

Tex., Sinton—City granted O. R. Seagraves of Galveston, Tex., 30-yr. franchise; will construct 4-in. pipe line distance of 11 miles; will also construct 15 mile pipe line to Robstown.

Tex., Refugio—Pratt-Hewitt Syndicate is having plans prepared for erection of carbon black plant; estimated cost \$250,000; will soon call for bids.

Tex., San Angelo—Orient Oil Co., incorporated by G. B. Hendricks, W. A. Hooper and others.

Tex., Smithville—Cardinal Oil Co., capital \$25,000, incorporated by Wm. Green, P. B. Searcy and others.

Tex., Sour Lake—Southwestern Refining Co., incorporated by Robert E. Moody, W. I. Hunter and others.

Tex., Wichita Falls—American Pipe Line Co., increased capital from \$200,000 to \$500,000.

Ice and Cold-Storage Plants

Fla., St. Petersburg—C. L. Wood of Wood Bros., Graham, Tex., has acquired 125x141-ft. site corner 10th and 5th Ave., and will erect \$250,000 ice plant; machinery ordered.

Ga., Columbus—Empire Mills, F. A. Heard, Pres., increased capital, contemplate enlarging plant.

Mo., St. Louis—Polar Wave Ice Co. let contract to Bell Brothers, Moberly, Mo., to erect 230x83-ft. plant, portion of building will be 50 ft. high; estimated cost \$125,000.

Okla., Tulsa—County Commrs. let contract to United Iron Works, Tulsa, to equip the refrigeration plant, at \$8518; refrigeration plant to be in same building as the hospital.

Tenn., Tracy City—Mountain Ice Co., C. W. Kenoble, Treas.-Mgr., has fireproof building and machinery all installed, daily output 11 tons ice. (Previously noted.)

Tex., Austin—San Antonio Machine & Supply Co., of San Antonio, has received contract to equip ice plant at State Lunatic Asylum, cost \$17,000.

Tex., Austin—Austin Ice Co., capital \$80,-

000, incorporated by Chas. A. Zilker, Geo. E. Shelley and others.

Tex., Dallas—C. E. Kennemer, 1322 Marilla St. will raze and rebuild concrete ice plant; estimated cost \$20,000.

Tex., Fort Worth—Polytechnic Ice Co., capital \$50,000, incorporated by J. P. King, R. C. Murphy and others.

Va., Norfolk—McPherrin Ice Corp., R. A. McPherrin, Pres.-Mgr., 1063 38th St., has 75x125-ft. fireproof plant, machinery all installed; daily output 120 tons; (Lately noted incorporated.)

Land Development

Ala., Birmingham—Hewitt, Bishop Real Estate & Insurance Co., 120 North 21st St., capital \$10,000, incorporated by Rubert G. Hewitt, Edward P. Bishop and others.

Ala., Birmingham—Forest Home Realty Co., incorporated by H. K. Long, Roy McCullough and others.

Ark., Little Rock—City, Mayor Brickhouse, engaged B. F. Pierce, of Chicago, Ill., for landscape gardening on City Park and fair grounds; James H. Rice, City Engr.

Ark., Little Rock—City will purchase 120 acres land for municipal park and fair grounds, site known as the Fulk tract; has \$79,312.50 available. Address The Mayor.

Fla., Deerfield Beach—Ocean Heights Development Co., of Fort Lauderdale, Fla., previously noted incorporated with \$25,000 capital, J. D. Butler, Pres., Deerfield, Fla.; has 75 acres and will develop.

Fla., Miami—J. P. Simmons and associates acquired 80-acre tract in Coral Gables and will develop for subdivision.

Fla., Pensacola—Adolfo Rasponi and Angelo Contri acquired 75 acres of land and will develop in Satsumas and blueberries.

Fla., St. Petersburg—Frank Burkhand and associates have acquired 80 acres and will develop for subdivision.

Fla., Tampa—B. L. Hammer and associates reported to plan expending about \$3,000,000 in developing chain of small islands in Hillsborough Bay lying between Hyde Park and Seddon's Island, for subdivision; plans include building sea wall, dredging and filling, laying streets, sidewalks, water mains and sewers, installing public utilities and constructing causeway connecting island with mainland.

Md., Baltimore—Patterson Realty Corp., 443 Calvert Bldg., incorporated by Phillip Blum, Joseph M. Schlessinger and others.

Md., Baltimore—Kent Island Realty Co., 101 Light St., incorporated by Guy B. Brown, Charles Russell and others.

Mo., Chillicothe—Gill & Ryan will develop 20 acres for subdivision; construct roads and streets, extend city sewer system, etc. (Lately noted.)

Mo., Kansas City—Wm. E. Lyons Development Co., capital \$10,000, incorporated by Wm. E. Lyons, Emmett G. Reid and others.

N. C., Asheville—Elk Mountain Orchard Co., capital \$100,000, incorporated by J. T. Bledsoe, E. L. Ray and others.

N. C., Kings Mountain—Town, H. C. Dwelle, Comr. of Public Works has retained E. S. Draper, Landscape Archt. and City Planner, 11 E. 5th St., Charlotte, N. C., to make survey and complete plans for improvements of old cemetery and development of modern cemetery of 20 acres.

N. C., Mt. Airy—A. W. George Realty Co., capital \$50,000, incorporated by A. W. George, J. M. Wagoner and others.

N. C., Raleigh—Haywood Real Estate Co., capital \$200,000, incorporated by Ernest Haywood, Raleigh; T. Holt Haywood, New York and others.

S. C., Columbia—Dutch Fork Truck Farm, Inc., incorporated with W. T. Huffman, Pres.; E. B. Huffman, Sec.

S. C., Spartanburg—P. S. Cecil, Contr. has acquired 4½ acres of land and will develop for subdivision; will install sewers, gas and electric light extensions, etc.

Tenn., Memphis—Bulman Investment Co., 650 Bank of Commerce & Trust Co. Bldg., capital \$30,000, incorporated by Wm. C. Bulman, Joseph Lewis and others.

Tex., Beeville—Beeville Orchard & Nursery Co., Frank Huntington, Mgr. will develop 100 acres near Beeville; will install well pumping plant; construct native adobe roads; erect dwelling; small homes for laborers, barn, implement sheds, packing sheds, etc.; cost \$10,000. (Lately noted.)

Va., Bristol—F. R. Shipley has acquired about 35 acres of land and will develop for subdivision; will construct roads and streets, etc.

Va., Norfolk—Hope Real Estate Corp., capital \$50,000, incorporated by S. H. Tyler, Pres.; W. E. Kyle, Sec.

Va., Norfolk—Scudamour Realty Corp., capital \$25,000, incorporated with Sadie W. Moore, Pres.; P. Frame, Sec.

Va., Norfolk—Lesner Realty Corp., capital \$100,000, incorporated with John A. Lesner, Pres.; H. T. Crusier, Jr., Sec.

W. Va., Bluefield—Cole Realty Co., increased capital from \$800,000 to \$1,000,000.

W. Va., Shinnston—Richardson Land Co., capital \$50,000, incorporated by G. P. Horner, Walter I. Moore, of Lumberport; Edwin V. Richardson, Shinnston.

Lumber Enterprises

Ala., Tuscaloosa—Law Lumber Co., capital \$25,000, incorporated by Roscoe Law, J. C. Persons and others.

Arkansas—F. T. Dooley Lumber Co., F. T. Dooley, Pres., Memphis, Tenn., reported to have acquired between 6000 and 7000 acres timber lands in Arkansas and Phillips counties, Ark., tract embraces approximately 40,000,000 ft. hardwood will probably move general office to Brinkley, Ark.

Fla., Bradentown—R. L. Dowling & Sons, R. L. Dowling, Pres., Green Cove Springs, Fla., has acquired the holdings of the Roux-Askew Lumber Co., purchase includes double mill with capacity of 2,000,000 ft. of lumber monthly, 200,000,000 ft. of standing timber on tract of about 90,000 acres land.

Ky., Lothair—Lothair Lumber & Supply Co., capital \$25,000, incorporated by C. R. Patten, of Lothair; Roy Helm, Hazard, Ky.

Miss., Grenada—E. C. Thompson Lumber Co., capital \$25,000, incorporated by E. C. Thompson, A. M. Carrothers and others.

Miss., Laurel—Richardson-Gardiner Lumber Co., capital \$50,000, incorporated by A. M. Richardson, D. F. Gardiner and others.

N. C., Charlotte—Paul Lumber Co., 214 Bryant Bldg., increased capital from \$1,000,000 to \$2,000,000.

S. C., Garlington (Clinton)—Muriel Lumber Co., Wadesboro, S. C. (lately noted incorporated, capital \$100,000), organized with L. D. Robinson, Pres.; E. C. Robinson, Jr., Treas.; has plant, will install saw mills, planer, etc., daily output 2 to 4 cars roofers; invite prices on 100 h. p. boiler, 80 h. p. engine and 3 to 4 tons of 14 to 20-lb. rails. (See Machinery Wanted—Boiler; Engine; Rails.)

Tex., Fort Worth—Judd-Timmons Lumber Co., increased capital from \$75,000 to \$100,000.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

Va., Graham—Graham Lumber Co., increased capital from \$30,000 to \$100,000.

W. Va., Moundsville—Hunter-Gray Lumber Co., capital \$50,000, incorporated by C. H. Hunter, G. F. Gray and others.

Metal-Working Plants

Ga., Atlanta—Pridgen Roofing Co., 186 Whitehall St., re-organized with R. L. Pridgen, Pres.; Mrs. M. B. Nealy, Office Mgr.; changed name from Acre-Pridgen Roofing Co.

N. C., Raleigh—Carolina Sheet Metal Works, capital \$10,000, incorporated by W. Ray Reichberg, James A. McGraw and others.

Mining

Ala., Oneonta—Youngstown Mining Co., R. F. D. No. 4 (lately noted incorporated) organized with W. H. Young, Pres.-Mgr., Oneonta; J. A. Simpson, Sec. and H. M. Norwood, Treas., both Birmingham, Ala.; has about 1000 acres under development, present output 200 tons.

Ark., Little Rock—Arkansas Granite Co., capital \$150,000, incorporated with W. P. Barr, Pres.-Gen. Mgr.; Walter A. Brannen, Sec.-Treas.; has 280 acres, will develop granite quarries.

Md., Whiteford—The Staso Milling Co., A. B. Cook, V.-P. and Gen. Mgr., Poultney, Vt., will erect \$250,000 plant for the mining and preparing of slate for roofing purposes, estimated output 40,000 tons; plant will probably be completed by Feb. 1, 1924.

Mo., St. Louis—Missouri Marble Quarries, Inc., capital \$1,500,000, incorporated with Geo. J. Breaker, Pres.; R. T. Maher, Sec.; Victor Proetz, V.-P. and Archt.; will develop marble quarry, estimated as having 340,000,000 cu. ft. marble.

Okla., Gardin—Golden Rod Mining & Smelting Corp., H. C. Mills, Treas., Box 106, has mining lands under development, daily output from 150 to 175 tons; H. H. Wallower, Supt. and Const. Engr. (Lately noted.)

Va., Staunton—Virginia Consolidated Lime Co., capital \$150,000, incorporated with Najah C. Taylor, Pres.; Robert E. Christian, Sec.; to quarry limestone.

Miscellaneous Construction

Fla., Fort Lauderdale—Docks, etc.—Details under Water Works.

Fla., Fort Worth—Inlet—South Lake Worth Inlet Dist. Commrs., A. A. Atwater, Chmn., lately noted to construct inlet connecting Lake Worth with the Atlantic Ocean about 1 mi. north of Boynton Beach; voted \$125,000 bonds.

Fla., Tampa—Seawall—Details under Land Developments.

Fla., West Palm Beach—Seawall—City will build seawall extending from Southland Park to the north limits of South Palm Beach; has \$25,000 available; Fugate Engineering Co., Engrs.; also let contract to Heights Land Co., M. B. Monroe, Pres., at \$15,813, to construct seawall on Lake Worth along the front of Southland Park.

Ky., Uniontown—Dam—Government, reported to have purchased 25 acres land, will erect dam with a concrete wall 1900 ft. long on the Kentucky shore.

Md., Baltimore—Conduits—Details under Road and Street Construction.

Md., Cumberland—Swimming Pool—See Miscellaneous Enterprises.

Miss., Yazoo City—Swimming Pool—Herbert Holmes and associates interested in construction of swimming pool; site not selected.

Mo., Carthage—Swimming Pool—City con-

templates building swimming pool, estimated cost \$20,000. Address The Mayor.

Tex., San Antonio—Flood Prevention—City will construct retarding dam at outlet of Olmes Creek basin which empties into the San Antonio River, concrete construction; building of dam will be first step in flood prevention project; voted \$2,800,000 bonds.

Va., Norfolk—Storage Tanks—Norfolk & Western Ry. Co., W. P. Wiltsee, Act. Chf. Engr., Roanoke, Va., let contract to Virginia Bridge & Iron Co., Roanoke, Va. to supply material and erect two creosote storage tanks at Lamberts Point, capacity 750 gal. each; estimated cost \$60,000.

Miscellaneous Enterprises

Ala., La Fayette—Publishing—C. L. and W. O. Walton has acquired the La Fayette Sun and will operate.

Ala., Montgomery—Good Roads Gravel Co., capital \$50,000, incorporated by W. B. Mobley, T. W. Townsend and others.

Ala., Tuscaloosa—Stallworth Scales Floral Co., incorporated by John R. Stallworth, Hugh Scales, Jr. and others.

Ark., Fayetteville—Ely & Walker Dry Goods Co., St. Louis, Mo., will erect plant for the manufacture of work garments; 60x140-ft.; ordinary construction; cost \$35,000; address building proposals to Bruce Holcomb, Fayetteville, Ark.

Ark., Gravette—Fred Keeler will establish tannery, install machinery, etc.

Ark., Little Rock—Stratton-Warren Hardware Co., of Memphis, Tenn., have acquired the Kidd-Bossinger Hardware Co.; will continue existing business.

Ark., Springdale—J. C. Nelson will convert canning plant into cheese factory.

Fla., Orlando—Kissam-Newell Supply Co., increased capital from \$25,000 to \$100,000; changed name from Kissam-Harris-Newell Co.

Fla., Pensacola—Pensacola Apartment & Theatre Co., capital \$800,000, incorporated with W. B. Harbeson, Pres.; L. C. Hagler, Sec.

Georgia—Pine Waste Products Co., Inc., Stamford, Conn., reported as leasing tract of land for the establishment of paper and pulp mill. Wire from the Company states: No decision will be made for sixty days regarding possibility of Georgia plant.

Ga., Augusta—Walter King Drug Co., incorporated by Walter King, William P. Congdon and others.

Ga., Augusta—Frank J. Story Co., capital \$10,000, incorporated by F. J. Story, L. E. Carpenter and others.

Ga., Greenville—Charles Samuel Peabody, Archt., 101 Park Ave., New York and associates, reported to have acquired Warm Springs Resort, having 1200 acres, will make extensive improvements, including golf links, hunting and fishing grounds, erect hotel, etc.

Ky., Louisville—Falls City Bindery Co., capital \$15,000, incorporated by Jos. and Robert H. Uhlen and others.

La., Monroe—J. M. Supply Co., Inc., capital \$60,000, incorporated by Fred Stovall, J. M. Yarborough and others.

La., New Orleans—Transportation—Algiers Public Service, Inc., will issue \$200,000 bonds to purchase two additional ferry boats.

La., New Orleans—Continental Tobacco Co., Inc., incorporated with David A. Schulte, Pres.; will manufacture cigarettes and smoking tobacco.

La., New Orleans—Bogalusa Paper Co., reported to erect \$1,000,000 paper plant in New Orleans, La., to manufacture chip board used in making boxes, estimated daily output 75 tons. Wire from W. H. Sullivan states: Bogalusa Paper Co. will install 96-in. cylinder paper machine in New Orleans to manufacture chip board and all other kinds of board used in the manufacture of containers. As soon as this machinery is in operation they expect to install machinery to manufacture solid fibre and corrugated shipping cases also all kinds of small boxes; expect to have plant in operation within four or five months.

Md., Baltimore—Motion Pictures — Non-Theatrical Supply Co., 618 St. Paul St., capital \$60,000, incorporated by Jos. O. Miller, Albert M. Paulus and others.

Md., Baltimore—Delcher-O'Connor Co., 1008 Munsey Bldg., capital \$25,000, incorporated by John J. O'Connor, Irving B. Delcher and others.

Md., Baltimore—United Tool & Supply Co., 900 W. Lombard St., capital \$100,000, incorporated by Benj. F. James Pierpont and others.

Md., Baltimore—Children's Publishing Co., 916 Harlem Ave., capital \$250,000, incorporated by Turner W. Isaac, Wm. C. Dittman and others.

Md., Baltimore—Locke Insulator Corp. Charles and Cromwell St., let contract to J. Henry Miller, Inc., to erect 1-story, 122x80-ft. brick building for galvanizing plant; cost \$17,000; W. S. Austin, Archt.-Engr., Maryland Trust Bldg.

Md., Baltimore—Natatorium Assn., Inc., Hearst Tower Bldg., capital \$40,000, incorporated by Chas. M. Brown, John O'Brien and H. Kemp McCoy. (Lately noted to construct natatorium at Carlin's Park.)

Md., Baltimore—St. Louis Motor Coach Corp., 101 E. Fayette St., incorporated by Geo. S. Newcomer, Douglas H. Rose and others.

Md., Baltimore—Penn Dairies, Inc., 101 E. Fayette St., incorporated by Jos. F. Murray, Frank S. Muzzey and others.

Md., Baltimore—American Thermos Bottle Co., 101 E. Fayette St., incorporated by Douglas H. Rose, Leslie E. Mihm and others.

Md., Baltimore—Crown Oil & Wax Co., 8th and Pratt Sts., capital \$500,000, incorporated by Herbert A. Megraw, Wirt A. Duvall, Jr. and others.

Md., Cumberland—Cumberland Fair Association, Inc., Tasker G. Lowndes, Chmn., of Finance Committee, has acquired 100 acres for racing and agricultural fair grounds; will develop half mile race course, baseball and football fields, swimming pool, various exhibition buildings, etc.; estimated cost of project about \$100,000.

Md., Cumberland—C. A. Borchert Co., capital \$20,000, incorporated by Chas. W. Yergan Clarence Borchert and others.

Md., Elkton—Maryland Tool Co., capital \$75,000, incorporated by Louis B. Blue, Paul Spencer and others.

Md., Mount Savage—Mt. Savage Amusement Co., capital \$20,000, incorporated by M. J. Mullaney, P. A. Tannon and others.

Md., Oakland—United States Auto Chain & Twin Hook Co., of Grafton, W. Va., reported to move plant to Oakland, will enlarge.

Md., Oakland—Oakland Shoe Manufacturing Co., incorporated by Chas. M. McIntire, Henry Lauer and others.

Mo., Carthage—J. S. Cantrell and associates interested in organization of Ozark Hatchery to establish hatchery plant.

Mo., St. Louis—Faust Paint Co., increased capital from \$25,000 to \$50,000.

Mo., St. Louis—F. Tieman Stove & Hardware Co., increased capital from \$50,000 to \$100,000.

Mo., St. Louis—Cascade Wet Wash Laundry Co. let contract to Fruin-Colon Contracting Co., Merchants Laclede Bldg., to erect 1 story, 125x241½ ft. laundry building at 2655 Victor St., cost \$60,000; Leonard Haeger, Archt., 3844 Utah Place.

Mo., St. Louis—John J. Goge & Son, capital \$100,000, incorporated by J. J. Goge, Birdie Grosblatt and others.

Mo., St. Louis—Revere Transit Co., capital \$10,000, incorporated by V. J. and Jno. J. Becherer and others.

Mo., St. Louis—Renard Linoleum & Rug Co., increased capital from \$1,000,000 to \$1,200,000.

Mo., St. Louis—Sanitary Preserving Co., incorporated by H. S. Rand, and B. J. Volmer.

Mo., St. Louis—Handy Electric Lantern Co., incorporated by J. A. Handy, L. Handy and others.

Mo., St. Louis—Orchard Paper Co., 713 Spruce St., Louis Weenick, Sec., lately noted to have acquired building, will remodel and alter; will expend \$30,000; install printing machinery; equipment purchased; William Reese, Archt., 713 Spruce St.; Wm. Ridout & Co., Constr. Engr., Tower Bldg.

Mo., Webster Grove—Webster Construction and Concrete Co., incorporated by Norman O. Vegely, Bernard C. Edmunds and others.

N. C., Charlotte—Y and B Corporation, capital \$750,000, chartered by J. A. Yarbrough, J. J. Austin and others.

N. C., Charlotte—Southern Baker Bakery, incorporated by Fred Hummert and H. Jagel; have acquired established plant at 29 N. Tryon St. and will install additional equipment.

N. C., Durham—Durham Ice Cream Co. let contract to Wilkerson Construction Co., Inc., Durham, to erect ice cream plant at West Main and Duke Sts.; 2 stories; 27x100 ft.; tapestry brick and tile.

N. C., Greensboro—Southern Milk Products Co., capital \$300,000, incorporated by J. M. Rockwell, Charlottesville, Va.; W. H. L. Kent, Newport News, Va., and others; has site and will erect creamery.

N. C., High Point—North Carolina Reed Co.'s plant, lately noted burned, was only partially damaged and repairs have been completed and plant is in operation.

N. C., Morehead—State Fisheries Comsn. Board will locate main fish hatchery in Haywood County near Balsom; will establish 3 auxiliary hatcheries near Old Fort, Boone and near Roaring Gap.

N. C., New Bern—Mill Supply Co., capital \$150,000, incorporated by W. B. Blades, A. F. Patterson and others.

N. C., Newton—Fisher Manufacturing Co., incorporated by S. J. Smyer, G. C. Little and others.

N. C., Winston-Salem—Crystal Candy Co., will erect 5-story, 75x185-ft. building on Shallowford St., and will adjoin present warehouse; reinforced brick construction; containing about 75,000 sq. ft. floor space; plans being completed and will soon ask for bids.

Okla., Cushing—White Ice Cream Mfg. Co. will erect new plant; has acquired site. (Previously noted burned.)

Okla., Indianapolis—Producers Elevator Co., incorporated by J. F. Dooley, Ed. Wynn and others.

Okla., Okmulgee—Okmulgee Slaughtering & Market Co., W. H. Jones, Sec., will open building proposals in April, 1924, for erection of mill construction building, 30x100

ft.; daily capacity 50 heads of hogs and 50 head of cattle; will install refrigeration machinery.

Okla., Tulsa—Tulsa Bread Co., will erect bakery at 602 E. Third St.; 60x160 ft.; two and 3 stories; install modern baking equipment; cost \$100,000.

S. C., Greenville—Razier-Rogers Construction Co., incorporated with D. C. Rozier, Pres.; J. H. Rogers, Sec.

S. C., Greenville—Greenville Ice Cream Co. let contract to Gallivan Building Co. to erect 2-story, 55x110-ft. building corner Washington and Jones Sts.; brick construction, tin roof; estimated cost \$10,000.

S. C., Spartanburg—Citizens Publishing Co., increased capital from \$10,000 to \$60,000.

S. C. Spartanburg—E. O. Page will remodel building on S. Liberty St. for laundry.

Tenn., Memphis—Kross Town Kleaners & Dyers, capital \$25,000, incorporated by H. R. McCleary, Vernol L. Rogers and others.

Tenn., Clarksville—Associated Supply Co., capital \$100,000, incorporated by S. J. Baxter, Joshua Ford and others.

Tenn., Knoxville—Stone Fiz Co. of America, main office, Chattanooga, Tenn., will erect 1-story building, 180x150 ft., for the manufacture of soft drinks; daily capacity 1000 cases; J. M. Kantor, Fin. Mgr.

Tenn., Memphis—A. R. McNees Co., capital \$50,000, incorporated by A. R. McNees, Geo. Harsh and others.

Tenn., Memphis—American Publishing Co., P. O. Box 451, 784 Shrine Bldg., lately noted incorporated with R. H. Causey, Pres., has plant and will install printing machinery to cost \$135,000; bids opened. (See Machinery Wanted—Printing Machinery.)

Tenn., Nashville—Cumberland Presbyterian Board of Publication, Rev. J. L. Hudgins, Sec., will erect office and publishing building on 8th Ave.; 2 story; fireproof; steam heated.

Tenn., Union City—News-Banner Publishing Co., capital \$15,000, incorporated by E. E. Kersh, M. C. Pledger and others.

Tex., Austin—Incinerator—Details under Water Works.

Tex., Corsicana—West Marks Co., capital \$10,000, incorporated by J. C. West, M. L. Marks and others.

Tex., Fort Worth—Extracts—Parker-Browne Co. will erect addition to plant at Front and Oak Sts.; 3 stories; 50x162 ft.; brick and reinforced concrete; cost approximately \$80,000.

Tex., Galveston—Real Shine Co., capital \$10,000, incorporated by G. W. Leflair, V. T. Prichard and others.

Tex., Galveston—Ingersoll Amusement Co., capital \$100,000, incorporated by Geo. P. Prendergast, Audley Ingersoll and others.

Tex., Galveston—Laboratory—Board of Regents of the University of Texas, will erect 4-story fireproof building; bids until Jan. 14; further information apply to Herbert M. Greene Co., 620 North Texas Bldg., Dallas, Tex.

Tex., Greenville—Greenville Paper Co., incorporated by W. H. Camp, T. D. Starnes and others.

Tex., Houston—Houston Cotton & Twine Mills, capital \$100,000, incorporated by J. W. Prichard, V. L. Parson and others.

Tex., Houston—Ringer & Co., Inc., changed name from Ringer & Marks, Inc.; increased capital from \$20,000 to \$30,000.

Tex., San Antonio—Home Ranch Co., capital \$100,000, incorporated by E. E. Over-

street, Geo. M. Mayer and others.

Tex., Sherman—John C. Dannel let contract to Morgan & Gibbs, Sherman, to erect funeral home on Walnut and Jones Sts.; 2 stories; brick veneer and will contain chapel, choir rooms, etc., with garage in rear with accommodations for 6 automobiles.

Tex., Waco—The Electric Express Line will erect \$10,000 building on Washington Ave.

Tex., Waco—Star Laundry & Cleaners, Inc., changed name from Star Laundry, Ralph Buchanan, Pres.; Halbert Buchanan, Sec.-Treas.; will operate laundry.

Va., Danville—Virginia Tobacco-Curer Co., capital \$25,000, incorporated with H. A. Wiseman, Jr., Pres.; J. M. Lee, Sec.; to manufacture oil burning tobacco curing apparatus.

Va., Graham—Harman Broyles has building and will install overall and shirt factory.

Va., Norfolk—Norfolk Confectionery Co., capital \$10,000, incorporated with H. Willenzig, Pres.; I. P. Gordon, Sec.

Va., Norfolk—Bryan Transportation Co., capital \$25,000, incorporated with M. B. Bryan, Pres.; Wm. H. Sands, Sec.

Va., Norfolk—J. J. Leterman & Sons, capital \$10,000, incorporated with J. J. Leterman, Pres.; J. J. Leterman, Jr., Sec.

Va., Norfolk—Transit Corporation, capital \$25,000, incorporated with G. G. Plott, Pres.; L. T. Plott, Sec.

Va., Norfolk—Jasmine Ink Corp. increased capital from \$150,000 to \$300,000.

Va., Norfolk—Beskin Cigar Co., capital \$20,000, incorporated with S. Beskin, Pres.; H. Beskin, Sec.

Va., Petersburg—Clothboard Sales Corp., capital \$10,000, incorporated with T. F. Heath, Jr., Pres.; Chas. Edgar Gillian, Sec.

W. Va., Charleston—Ashley Bread Co., capital \$100,000, incorporated by Grant L. Ashley, O. C. Jones and others.

W. Va., Clarksburg—Clarksburg Glass Co. let contract to install sheet glass making machinery; will convert plant from hand to machine process.

W. Va., Huntington—American Thermos Bottle Co., reported to plan enlarging plant.

W. Va., Huntington—F. C. McCole Granite Co., will erect building at 1214 3rd Ave.; 2 stories of tapestry brick, with granite trimmings; J. J. West, Inc., Contrs.

W. Va., Huntington—Guyan Milk Co., acquired 600 acres and will establish dairy farm.

W. Va., Wardsville—Wardsville Paint & Mineral Co., E. H. Ranck, Pres., will begin construction of several buildings after Jan. 1, 1924, portion of necessary machinery has been purchased and will be installed as buildings are completed.

Motor Cars, Garages, Tires, Etc.

Ala., Birmingham—Auto Storage, Tire and Battery Co., Inc., incorporated by C. T. Mayfield, J. P. Atkinson and others.

Fla., Jacksonville—Ford Motor Co., Detroit, Mich., has acquired 9¼ acres on water front, site previously secured regarded as too small, hence purchase from City of larger site. (Previously noted to erect \$350,000 assembling or distributing plant.)

La., New Orleans—Marine Oil Co., Ltd., Geo. J. Whitman, Sec., 760 St. Charles St., let contract to Doullut & Williams, Inc., New Orleans, to erect fireproof shed over grease and lubricating racks for auto filling and greasing service station.

Md., Brooklyn Sta., Baltimore—Stalling-Ripple Chevrolet Co., 34 1st St., capital \$50,000, incorporated by Elmas Stallings, Sidney A. Ripple and others.

Md., Hagerstown—M. P. Moller, owner of Crawford Co., plans reorganization; has contract for building 300 taxicabs for the Luxor Taxi Cab Co. of New York; also plans moving plant into new location having 176,000 sq. ft. floor space. (Lately noted.)

Mo., St. Louis—Suburban Tire Service Co., capital \$30,000, incorporated by E. L. DeWinter, F. C. Mosier and others.

N. C., Asheville—Asheville Overland-Knight Co., Oscar M. Jackson, Pres., will occupy 4-story fireproof storage building on Valley and College Sts., concrete construction, having about 100,000 sq. ft. floor space; with storage capacity 1200 automobiles; Smith & Carrier, Archts.; Heath A. Carrier, is financing the project; approximate cost \$300,000.

N. C., Winston-Salem—Gulf Refining Co. will erect the following buildings on White St.: 80x60-ft. petroleum storage building of brick with reinforced concrete construction; 62x54-ft. garage building, brick with concrete construction; boiler house and loader shed; total cost \$27,800.

Okla., Ponca City—Ponca City Motor Supply Co., capital \$50,000, incorporated by Frank E. Smith, Fred W. Halfley and others.

Okla., Sand Springs—Broadway Motor Supply Co. (lately noted incorporated, capital \$10,000) organized with Chas. B. Rawson, Pres., care of Sand Springs State Bank; C. H. Rawson, Sec.-Treas. and Mgr.; will erect \$10,000 fireproof, automobile salesroom, open bids about Jan. 15, 1923.

Okla., Tulsa—Chandler-Cleveland Motor Co., capital \$30,000, incorporated by B. W. Bridle, Warren Brown and others.

S. C., Bishopville—Peedee Motor Co., incorporated with N. Y. Alford, Pres.; W. A. James, Sec.-Treas.

Tenn., Chattanooga—Garage—City, Richard Hardy, Mayor, contemplates erection of municipal garage building.

Tenn., Memphis—Ford Motor Co., Detroit, Mich., reported to have secured site to erect cotton mixing plant to manufacture automobile cushions, etc., using 100,000 bales of cotton annually.

Tex., Corsicana — Hamilton Automobile Co., capital \$10,000, incorporated by Ed. Hamilton, Fred A. Reese and others.

Tex., Dallas—Dal-Chiff Motor Co., incorporated by M. D. Sanders, J. L. Anderson and others.

Tex., Floresville — Floresville Motor Co., Box 31, (lately noted incorporated, capital \$25,000) organized with H. E. Hildebrand, Pres., W. E. Gordon, Sec.-Treas.; has building, will install equipment for the repair and rebuilding of automobiles, especially of Fords. (See Machinery Wanted — Garage Equipment.)

Tex., Yoakum — Garage—A. W. Swenson will erect 1 story, brick and concrete garage building, cost \$17,500; has plans.

Va., Newport News—Automobile Repairing—Mason Manufacturing Co., capital \$60,000, incorporated with Geo. W. Hardy, Pres.; Frank B. Hooper, Sec.

Va., Richmond—Dominion Motor Transit Co., incorporated by Morgan R. Mills and Geo. H. Black, both Richmond; Harry L. Snead, Petersburg; will operate passenger motor bus service between Richmond and Petersburg.

Va., Richmond—Automobiles—White Co. of Cleveland, Ohio, considering plans to establish branch plant; C. A. Moon, Dist. Sales Mgr.

W. Va., Fairmont—McDowell Motors, Inc., capital \$25,000, incorporated by Chas. O. McDowell, Albert H. Reeves and others.

W. Va., Wheeling—Red Star Transpor-

tation Co., capital \$25,000, incorporated by Charles E. Dixon, Wm. J. Nelbur and others.

Railways

Okla., Tonkawa—Santa Fe System, it is reported, will build immediately a line from Tonkawa to the Three Sands oil fields, about 4 mi. Second track will also be built from Ponca City to Maryland, about 12 mi. H. W. Wagner is Ch. Engr at Topeka, Kan.

W. Va., Seth—Coal River & Eastern Railway Co., incorporated, capital stock \$1,000,000, to build a line between Seth and Ashford, about 15 mi. in Boone County. Incorporators: Antrim E. Barnes, Gilden G. Hoffman, Harvey E. Fehr, George B. Hooper and Laurence E. Clark, all at 308 Euclid Ave., Cleveland, Ohio.

Railway Shops, Terminals, Roundhouses, Etc.

Ark., Pine Bluff—St. Louis Southwestern Ry. Co., W. S. Hanley, Chief Engr., Tyler, Tex., reported as having plans to install machinery in local shops to care for roads mechanical needs for period of ten years; also replace old machinery with new equipment in shops at Tyler, Tex.

Tex., Tyler—See Ark., Pine Bluff.

Road and Street Construction

Ala., Gadsden—City let contract to Chas. O. Duncan at \$19,500 for 5500 cu. yds. excavation 3750 sq. yds. sidewalks, and 8436 lin. ft. curb and gutter; and at \$18,719.25 for cement sidewalks, curbing and guttering on Argyle Circle; Ernest Smith, City Engr.

Ala., Jasper—Walker County plans building Jasper to Oakman highway. Address County Comms.

Ala., Montgomery—State Highway Comm., Montgomery, contemplates improving 29 mi. road from Montgomery to Marbury, along route of old Birmingham-Montgomery highway, via Roy Bridge.

Ala., Montgomery — City let contract to Hodgson & Jones, Montgomery at \$70,000 for 30,000 sq. yds. paving on S. McDonough St. from Washington to South St., and Adams St. from S. Court to Houston Sts.

Ala., Oneonta — State Highway Comm., Montgomery, Ala., will receive bids until Jan. 4 for 3.818 mi. road between Garden City and Warrior; Blount County Project No. 126; plans, etc., on file and from Div. Engr., Birmingham.

Ala., Ozark—Dale County plans building road from river to Ozark, and then on to Pleasant Ridge Church, about 6 mi. above Ozark. Address County Comms.

Ala., Rockford—State Highway Dept., Montgomery, Ala., will receive bids until Jan. 7 to pave 1740 ft. concrete road in Goodwater; town of Goodwater will widen road to 24 ft.; plans, etc., from W. S. Keller, State Highway Engr., Montgomery.

Ala., Talladega—City plans paving South and East Sts.; will receive bids in Jan. Robert L. Totten, Consol. Engr., Birmingham.

Ark., Little Rock—City let contract to W. D. Cook to pave with Warrenite, Street Improvement Dist. No. 351, including State St. from 10th to 20th Sts. Address The Mayor.

Fla., Bartow—Polk County plans building 106 mi. 15-ft. asphalt road, and widen 9-ft. roads to 15-ft.; will vote Feb. 26 on \$4,000,000 bonds. Address County Comms.

Fla., Bartow—Polk County let contract to W. P. McDonald Construction Co., Lakeland, Fla. to build 2 hard-surfaced roads from Florence Villa to Auburndale and Haskell-Lakeland, via Lakeland Highlands roads.

Fla., Dade City—State Road Dept., Tallahassee, Fla., let contract to Barber-Fortin Co., 42 Barnett Bldg., Jacksonville, Fla., for 11-1/3 mi. road, 20 mi. north of Tampa; 81 acres clearing; 168,000 cu. yds. excavation; 26 concrete culverts; 8-in. 17-ft. wide rock base; Pasco county Project No. 544-B.

Fla., Fort Lauderdale — Details under Water Works.

Fla., Madison—Details under Water Works.

Fla., Ocala—Marion County plans highway improvements; contemplates voting on \$1,250,000 bonds; J. E. Walker, County Engr.

Fla., Palm Beach—City plans extending Belvedere road west to city limits. Address The Mayor.

Fla., Pensacola—Escambia County let contract to Lawrence Construction Co., Jackson, Miss., to complete 10 mi. Pensacola-Flomaton road; part of old Spanish Trail.

Fla., Punta Gorda—Charlotte County let contract, subject to approval of State Road Dept., to Frank O. Wilkins, Punta Gorda, at \$92,786.54 to grade and construct drainage structures on 11 mi. State Highway No. 5 Tamiami Trail from Charlotte Harbor Bridge to Sarasota County line.

Fla., Tampa—Details under Land Developments.

Fla., Titusville—Chamber of Commerce interested in improving road from South-Mere to St. John's River.

Fla., West Palm Beach—Palm Beach County will receive bids until Jan. 2 to furnish material and complete 2.12 mi. hard surfaced road from West end of Lantana Bridge over Lake Osborne, to intersection with Military Trail road; plans, etc. from Chas. H. Holstlaw, County Engr.

Ga., Albany—City will receive bids until Jan. 7 for 7 blocks street asphalt on Jefferson St.; plans, etc., from P. F. Whittier, Director of Public Works.

Ga., Waynesboro—City plans street paving; voted \$45,000 bonds. Address The Mayor.

Kentucky—State Highway Comm., Frankfort, let contracts for 3 roads projects as follows: Allen County, 10.155 mi. rock asphalt, Scottsville-Glasgow road, from Scottsville to Barren County line, to Billiter & Wiley, Covington, at \$387,053.59; Laurel County, 5.5 mi. concrete London-Mt. Vernon road, from Rockcastle River to Federal Aid Project No. 29 to Travil & Ingram, Danville, at \$199,725.06; Knox County, 17.053 mi. concrete Barbourville-Corbin road, from Barbourville to Corbin, to R. L. Peters, Knoxville, Tenn., at \$555,812.36. (Lately noted.)

Kentucky—State Highway Comm., Frankfort, received low bids for 4 road projects as follows: Hart County, State Project No. 3 Sec. 4, 1.969 mi. Buffalo-Hardyville road, from Larue County line to end of Federal Aid Project No. 7, Sec. A, at Sand Hollow, Twyman & Hanley, Hodgenville, Ky., at \$52,147.38, for waterbound macadam; F. G. Breslin, Louisville, at \$3500.46 for oil surface treatment; Larue County, State Project No. 3, Sec. B, 11 mi. Bardstown-Hodgenville road, from Nelson County line to corporate limits of Hodgenville; Ellis & Smeathers, Owensboro, at \$232,885.08 for gravel surfacing; Atlantic Refining & Asphalt Co., Atlanta, Ga., at \$15,775.03, for oil surface treatment; Harrison County, State Project No. 58 1/2, Sec. B, 10.7 mi. Georgetown-Cynthiana road from Clark County line to city limits of Cynthiana, Ben W. Gorham, Lexington at \$66,794, for waterbound macadam re-surfacing; Garrard and Boyle Counties, State Project No. 25, Sec. A, 1.6 mi. Nicholasville-Danville road from Marcellus to point 400 ft. beyond Kentucky River, Bates Paynter

Co., Danville, Ky., at \$34,396.14, for water-bound macadam; Southern Oil & Tar Co., Louisville at \$2321.06 for oil surface treatment.

Ky., Irvine—State Highway Comn., Frankfort, let contract to J. S. Lusk, Knoxville, Tenn., at \$253,992.26 to grade and drain 10.941 mi. Irvine-Beattyville road from south corporate limits of Irvine to Lee County line; State Project No. 29, Sec. B.

La., Baton Rouge—City let contracts for sidewalk paving as follows: To Capital City Construction Co., on Palmer St., Dufrock, Annette, St. Ferdinand and Highland road, at \$1.59 per sq. yd.; to T. L. Bozeman, on Railroad Ave., Julia, Elvira, McCalop and Downey, at \$1.70 per sq. yd.; Eleanor, at \$1.60, and South Blvd., at \$1.59; F. F. Pillet, City Engr.

La., Coushatta—Louisiana Highway Comn., Raymond Bldg., Baton Rouge, plans building 31 mi. highway including road from Natchitoches Parish to Caddo Parish.

Md., Baltimore—City, Howard W. Jackson, Mayor, plans following improvements and contemplates \$19,500,000 bond issue: Bridges, \$3,000,000; sewers, \$10,000,000; paving, \$5,000,000; conduits, \$1,000,000.

Md., Baltimore—Paving, Comm., R. Keith Compton, Chmn., 214 E. Lexington St., plans paving following streets, developers to pay half: Overland Ave. from alley west of Arabia Ave. to Walther Ave.; Arabia Ave. from Overland to Montebello Terrace; Dale road from Crest road to alley west of Crest road; Lake Ave. from Harford to Norman Aves.; Lakeside Ave. from Tivoly to Taylor St.; Elmley Ave. from St. Cloud to Highview Aves.; Snowdown, from 6th St. to point 800 ft. north; Calverton Heights Ave. from Wheeler to Warwick Aves.

Missouri—State Highway Dept., Jefferson City, Mo., let contracts for road projects as follows:

Pettis Co., 3 sections from Sedalia to Dresden; 3.566 mi. earth work, to A. A. Davis & Co., Oklahoma City, Okla., at \$35,036.29; 3.566 mi. 18-ft. penetration macadam, to A. A. Davis, at \$34,668.08; both State Project, Route 12, Sec. 17; 1:572 mi. 30-ft., grade to Bertman & Menefee, Sedalia, Mo., at \$10,721.45; Taney County, 2 sections; grade .089 mi. from Branson to Hollister, State Project Route 3, Sec. 15, to Easley Bros., Aurora, Mo.; grade 4.207 mi. from Forsyth to Branson, State Project Route 76, Sec. 8; to Smith & Creech Construction Co., St. Louis, Mo., at \$35,423.78; Jackson County, 4 sections; from Kansas City to Harrisonville; 2.917 mi. earth work, to Carterville Construction Co., Carterville, at \$14,926.16.

2.917 mi. 18-ft. concrete pavement, to Carterville Construction Co., at \$79,672; both State Project Route 35, Sec. 4; 2.583 mi. 18-ft. concrete pavement to Carterville Construction Co. at \$78,839.20; 2.583 mi. earth work to Carterville Construction Co., at \$16,223.38; both State Project Route 35, Sec. 3; Lafayette County, 2 sections to A. J. Cosby, Leeds, Mo., .729 mi. earth work, at \$38,023.88; and 18-ft. concrete pavement, at \$28,191.75; Buchanan County, grade 4.770 mi. from Faucett south, State Project, Route 1, Sec. 34, to M. E. Gillioz, Monett, Mo., at \$48,123.85; Holt County, grade 1.366 mi. from Oregon east, State Project Route 1, Sec. 13, to Allison Dillingham Construction Co., Oregon, Mo., at \$11,515.67.

Christian County, 2 sections from Ozark to Hollister; grade 4.104 mi. State Project Route 3, Sec. 108, to Cox & Chaney, Branson, Mo., at \$14,130.54; grade 4.024 mi., State Project Route 3, Sec. 107, to Carterville Construction Co., at \$9939.09; Monroe County, 4.034 mi. 16-ft. gravel sur-

face, from Paris to Shelby, State Project Route 15, Sec. 28, to Newton Construction Co., California, Mo., at \$38,970.22; Lincoln County, grade 4.040 mi. from Troy to Warrensburg, State Project Route 47, Sec. 1, to W. P. Smith, Troy, Mo., at \$29,210.92; Ozark County, grade 1.184 mi. Gamesville to West Plains road, State Project Route 80, Sec. 1, to Smith & Creech Construction Co., St. Louis, at \$11,885.95; Putnam County 2 sections, from Unionville to Iowa State line, to C. P. O'Reilly, St. Louis; grade 3.838 mi., State Project Route 5, Sec. 2, at \$14,314.92; grade 2.939 mi., State Project Route 5, Sec. 3, at \$8597.06.

S. C., Fort Mill—Town plans extending hard surface paving and improving street leading to and through Mill No. 2 of Fort Mill Manufacturing Co.; estimated cost \$30,000. Address the Mayor.

Miss., Belzoni—City plans grading, curbing and hard surfacing all streets; contemplates \$150,000 bond issue. Address The Mayor.

Miss., Jackson—Hinds County Board of Supvrs., will receive bids until Jan. 8 for 3 roads as follows:

Canton, from city limits on N. State St. to Fondren's Store; Clinton, from city limits on W. Capitol St. to beginning of concrete asphalt paving; Raymond, from city limits to fork of Raymond and Terry road, just below Lynch Creek; W. S. Wells, Chancery Clk.

Miss., Vicksburg—Warren County, Board of Supvrs., will receive bids until Jan. 9 to furnish and place gravel on road through Bovina; J. G. Sherard, Clk.

Mo., Carthage—State Highway Dept., Jefferson City, Mo., plans concrete extension of present Opolis-Asbury road from Asbury to point ½ mi. east of Waco; B. H. Piepmeyer, State Highway Engr.

Mo., Chillicothe—Details under Land Developments.

Mo., Jefferson City—City will receive bids until Jan. 7 to lay cement sidewalk in Washington Park Addition, on Ohio St. from St. Mary's Blvd. to Dunklin St.; F. E. Ross, City Engr.

Mo., Springfield—City plans widening Olive St. between Benton Ave. and Main St.; will also widen Traffic St. from South Jefferson to Campbell Ave. Address The Mayor.

N. C., Dallas—Town plans sidewalk improvements; contemplates \$20,000 bond issue; J. P. Hoffman, Clk.

N. C., Raleigh—City let contract to R. G. Lassiter & Co., Norfolk, Va., at \$425,000 for about 75,000 sq. yds. street improvements; authorized \$750,000 bond issue.

Okla., Pauls Valley—Garvin County plans building hard surface roads in County; will vote Jan. 4 on \$750,000 bonds. Address County Commrs.

S. C., Moncks Corner—Berkeley County let contract to W. N. Thompson, Burlington, N. C., at \$49,666.39 to grade, construct concrete waterways and sand-clay surface 9.529 mi. State Route No. 41, from point near 41 siding, through St. Stephen, to extension of Santee River Bridge Project.

S. C., Sumter—Sumter County plans building 7 roads as follows: Wildwood west to Rutland Ferry; Bushnell west to Weeds Landing; Sumterville northwest to outlet of Lake Panasoffkee, into Withlacoochee River; Coleman east to connect near Bamboo with Wildwood-Leesburg highway; Bushnell south to Rerdel via St. Catherine; Center Hill to Lake County line at Sloan Ridge; Center Hill, northeast 4 mi. to Lake County line, to connect with road to Leesburg; Terrytown to Sloan Ridge, via Linden and Mabel; con-

templates voting on \$650,000 bonds. Address County Commrs.

Tenn., Bristol—City plans asphaltting Ashe St. from Tennessee Ave. to bridge to be constructed, and from other end of bridge to 5th St.; L. H. Gammon, Mayor.

Tenn., Knoxville—City will receive bids soon to re-surface with hard asphalt top, 3750 ft. on Broadway from end of paving to city limits; estimated cost \$10,500. Address The Mayor.

Tex., Amarillo—Potter County will receive bids from Jan. 20 to 25th to gravel surface 6.06 mi. State Highway No. 33, D. C. D. Highway, between Amarillo and St. Francis; approximate cost \$70,000; Col. Oscar A. Seward, Jr., County Engr. (Lately noted.)

Tex., Austin—Travis County, George Matthews, Judge, voted \$1,500,000 of road bonds. (Lately noted.)

Tex., Cameron—Milam County will receive bids until Jan. 9 to grade, and construct drainage structures on 11.38 mi. State Highway No. 43; plans, etc., from A. F. Mitchell, County Engr., Cameron, and State Highway Dept., Austin, Tex.

Tex., Carrizo Springs—Dimmitt County plans 50 mi. gravel surfaced road on State Highway No. 85; estimated cost \$248,000; J. Guy Lott, County Engr.; Wm. H. Davis, County Judge.

Tex., Beeville—Details under Land Developments.

Tex., Bonham—Ch. Engr., U. S. Bureau of Public Roads, Washington, D. C., approved plans for 7.35 mi. 18-ft. concrete road on State Highway No. 5, Fannin County, Federal Aid Project No. 344; estimated cost \$267,876.21; Federal aid \$120,920.60; Pinckney B. Price, County Engr.; S. E. Neilson, County Judge.

Tex., Cameron—Milam County let contract to I. N. Robinson, Georgetown, for 3 mi. Rockdale oil field road from intersection of Rockdale-Tracy Highway near old Murray cemetery, to point where road crosses Cattail Creek, towards Minerva; also will receive bids until Dec. 28 to gravel 2 mi. road from Marlow school house to intersection with Milano-Cameron road. Address County Commrs.

Tex., Cameron—City let contract to W. E. Dozier, Austin, for street paving; will vote in Jan. on \$85,000 bonds; J. B. White, Mayor.

Tex., Canton—Van Zandt County plans building 7.15 mi. Dixie Highway; Federal Aid Project No. 363; estimated cost \$120,000; about 18 mi. to be built later; J. H. Bray, County Engr.; C. L. Hubbard, County Judge.

Tex., Dallas—City let contracts at \$519,469.24 for 134,043 sq. yds. street paving as follows:

To Smith Bros. at \$42,241.88 for 9785 sq. yds.; Fuller Construction Co., at \$157,235.70 for 40,390 sq. yds.; Central Bitulithic Co., at \$319,991.66 for 83,868 sq. yds.

Tex., Del Rio—Val Verde County will receive bids until Jan. 9 to grade, construct concrete drainage structures, and gravel 12.74 mi. road, beginning 15 mi. north of Del Rio; 88,851 lbs. reinforcing steel; approximate cost \$80,000; plans, etc., from G. M. Jowers, County Engr.; and State Highway Dept. Austin. (Lately noted.)

Tex., Denton—Denton County will receive bids until Jan. 11 for 5.59 mi. gravel road on State Highway No. 39 from Little Elm to Collin County line; plans, etc., from H. T. Brewster, County Engr. (Lately noted.)

Tex., Franklin—Robertson County, will receive bids until Jan. 11 for 9.74 mi. gravel road on State Highway No. 43-A, Federal Aid

Project No. 400, Sec. A.; Joe Reid, County Judge, Franklin; L. A. Peterman, Engr., Hearne, Tex.

Tex., Georgetown—Secy. of Agriculture, U. S. Bureau of Public Roads, Washington, D. C., approved plans for 6.5 mi. 16-ft. gravel road on State Highway No. 43; Williamson County, Federal Aid Project No. 427; estimated cost \$88,355.41; Federal Aid \$20,000; R. A. Nichols, County Engr.; F. D. Love, County Judge.

Tex., Graham—Young County plans highway improvements; contemplates voting on \$500,000 bonds; W. H. Reeves, County Judge.

Tex., Houston—State Highway Dept., Austin, approved plans to surface with shell base, and bituminous top, 1.56 mi. State Highway No. 3, Harris County, between Alameda and Fort Bend County line; estimated cost \$36,500; Howe & Wise, Engrs., 211 First National Bank Bldg.; Chester H. Bryan County Judge; both Houston.

Tex., Lamesa—City plans street paving; voted \$60,000 bonds. Address The Mayor.

Tex., Marlin—Falls County let contract to P. M. Skinner, Dallas, Tex., at \$66,000 for 1.84 mi. 18-ft. concrete pavement at Eddy, Tex.

Tex., Memphis—Hall County, Road Improvement Dist. No. 5 will improve highways; voted \$200,000 bonds; A. C. Hoffman, County Judge.

Tex., Memphis—Hall County plans 5 mi. concrete pavement on State Highway No. 5, Estelline Road Dist.; estimated cost \$200,000; Hasie & Preston, County Engrs.; A. C. Hoffman, County Judge.

Tex., Palestine—Anderson County let contract to Henderson & Co., Omaha, Tex., at \$321,071.83 for 2 road projects as follows: 9.8 mi. concrete on Palestine-Montalba road, and 4347 sq. yds. concrete paving adjacent to above work; 10 mi. gravel on Brushy Creek road, at \$32,443.83.

Tex., Palo Pinto—Palo Pinto County let contract at \$72,000, for following: To Tibbetts Construction Co., Fort Worth, for 4 mi. brick pavement on State Highway No. 1, between Mineral Wells and Parker County line; to McClung Construction Co., Cleburne, for 4 mi. concrete curb.

Tex., Robert Lee—Coke County will receive bids until Jan. 3 to grade and construct drainage structures on 14.47 mi. State Highway No. 7, from Bronte to Nolan County State Aid Project No. 439-C; E. J. Stockton, County Judge, Robert Lee; J. E. Beavers, County Engr., Bronte.

Tex., Rock Springs—Edwards County will receive bids soon to gravel surface 17.13 mi. State Highway No. 41, from Real County line to point 4 1/2 from Rock Springs; Federal Aid Project No. 335; estimated cost \$155,000; Federal Aid \$50,000; W. E. Simpson, County Engr., National Bank of Commerce Bldg., San Antonio; A. P. Allison, County Judge, Rock Springs. (Lately noted.)

Tex., Rosebud—City plans street improvements; will vote Jan. 2 on \$18,000 bonds; G. W. Lekman, Mayor, Jesse D. Rea, Sec.

Tex., Snyder—Scurry County plans building hard surfaced highway east and west through Snyder, Hamlin, Rotan, Gail and on to Lamesa. Address County Comms.

Tex., Tyler—Smith County plans 3 mi. 18-ft. concrete pavement on State Highway No. 64; Federal Aid Project No. 423; estimated cost \$100,000; Federal Aid \$45,000; D. K. Caldwell County Engr.; D. R. Pendleton, County Judge.

Tex., Wellington—Collingsworth County plans 7 mi. road from point 3 mi. north of Wellington to point 3 mi. south of Wellington; R. H. Templeton, County Judge.

Va., Bristol—City plans building and im-

proving driveways through King College campus. Address The Mayor.

Va., Bristol—Details under Land Developments.

Va., Norfolk—City will lay 5000 sq. yds. waterbound macadam roadway on S. Mowbray Arch. from point near Granby St. to Duke St.; approximate cost \$8000; W. H. Taylor, 3rd., Director of Public Works.

Va., Wise—State Highway Comm., Richmond, let contract to B. S. Cornett & Co., to grade and drain 4.5 mi. Appalachia to Kentucky line road; Wise County, Project S-245, Route 11.

West Virginia—State Road Comm., Charleston, W. Va., received low bids for 11 road projects as follows: No. 3160-Doddridge County, 8.14 mi. concrete Northwestern Turnpike, F. F. Hallanan Son, Fairmont, at \$268,961; 3134-B Hampshire County, grade and drain 5 mi. Pleasantdale-Hanging Rock road, Chandler & Armstrong, Moorefield, at \$96,960; 3278-A Lewis County, grade and drain 6.5 mi. Glenville-Weston road, Branham & Edwards, Clarksburg, at \$61,486; 3200 Logan County, grade and drain 6 mi. Blair-Ethel road, Eccles Construction Co., Marlinton, at \$89,824; 3274 Monongalia County, 8 mi. grading, draining and bituminous macadam paving on Morgantown-Preston County line road, Ebers-Bak Construction Co., Pomeroy, at \$373,651.82; 3304-A Monroe County, grade and drain 10 mi. Rock Camp-Peterstown road, J. J. Battershill & Son, Charlottesville, Va., at \$81,232 Pocahontas County 2 sections; 131-2.1 mi. bituminous macadam Marlinton-Buckeye road, Eccles Construction Co., at \$60,040, for oil; 132 4.2 mi. bituminous macadam Buckeye-Mill Point road, Battershill, Goode & Co., Charlottesville, at \$106,252.50; Preston County, 2 sections; 3186 grade and drain 5 mi. Thomas-Oakland road, H. H. Bruppy, Webster Springs, at \$53,760.50; 3273 grade, drain and pave with bituminous macadam 5.6 mi. Reedsville-Monongalia County line road, Dominick Rich, Weston, at \$227,756.50; 3229-Taylor County, grade and drain 7 mi. Northwestern Turnpike, Eccles Construction Co., at \$93,486.60.

West Virginia—State Road Comm., Charleston, received low bids for 13 road projects as follows:

3082-A-1—Wetzel County, grade, drain and pave with concrete .2 mi. from corporation line at New Martinsville to northerly line of Long St., Pipes & Johnson, Middlebourne, at \$5865; 130—Fayette County, 8.15 mi. bituminous macadam, Ravenseye-Greenbrier County line road, Sutton Construction Co., Ashland, Ky., at \$299,152.50; 128—Fayette County, grade, drain and pave with bituminous macadam 4 mi. at Ansted, Waugh Brothers, Fayetteville, at \$29,722.35 for oil, and at \$30,802.75 for Bermudas; 127—Greenbrier County, 5 mi. bituminous macadam Clintonville-Alta road, Ebers-Bak Construction Co., Pomeroy, Ohio, at \$172,860, Preston County, 2 sections:

3023-E—Grade and drain 5 mi. Northwestern Turnpike, F. H. Yeader & Son, Smithfield, at \$52,708.10; 3203-D—grade and drain 6 mi. Northwestern Turnpike, L. J. Chandler, Moorefield, at \$98,708.50; 3276—Barbour County, grade, drain and pave with bituminous macadam 1.5 mi. Philippi-Clarksburg road, F. H. Yeader & Son, Smithfield, at \$51,259.20; Wayne County, 2 sections; 3190—grade and drain 7.4 mi. Fleming-Dunlow road, and 3202-B—grade and drain 2.4 mi. Fleming-Dunlow road, C. E. Price, Huntington, at \$171,031.35.

3116—Wood County, grade, drain and pave with concrete 4 mi. Dallison-Ritchie County line road, and 3260—Ritchie County, grade, drain and pave with concrete 3 mi. Wood County line. Nutter Farm road, in one

contract, Venton, Law & Son, Cairo, at \$396,525.20; 3156—Calhoun County, grade and drain 1 mi. main St. at Grantsville, Hardaman & Minus, Spencer, at \$30,720.22. 3279-A—Webster County, grade and drain 10.8 mi. Diana-Cleveland Road, Waugh & Langley, Bluefield, at \$281,480.30.

Advice from Charleston states all bids received for both roads and bridges, on Tuesday and Thursday of last week rejected owing to failure to dispose of bonds.

W. Va., Fairmont—Marion County, Man-nington Dist., plans building 12 roads; contemplates voting about Feb. 1 on \$600,000 bonds; Lincoln Dist., plans building 9 roads; contemplates voting about Feb. 1 on \$333,200 bonds. Address Eng. Palmer.

W. Va., Philippi—State Road Comm., Charleston, W. Va., received low bid from Monongahela Construction Co., Fairmont, W. Va., at \$218,903 for 7.4 mi. bituminous macadam Philippi-Grafton road; Barbour County, Project No. 3184.

Sewer Construction

Ala., Birmingham—W. F. Franke of Shades Valley, petitioned Board of Revenue to construct complete sewer system; county engineer will make survey and prepare preliminary plans, with estimate of cost.

Ark., Helena—City Council appointed committee to investigate establishment of drainage system in business section of city; estimated cost \$60,000.

Fla., Fort Lauderdale—Details under Water Works.

Fla., Tampa—Details under Land Developments.

La., Baton Rouge—City let contract to J. B. McCrary Co., Atlanta, Ga., at \$126,854.65 to construct approximately half of the new sewer system. (Lately noted.)

Md., Baltimore—Details under Road and Street Construction.

Md., Baltimore—Board of Awards, C. F. Dolfield, City Register, will receive bids until Dec. 26 for building Dist. 24-B trunk sewer, sanitary Contr. 208; work comprises approximately 4200 ft. of sanitary sewers from 8 to 27-in., also to construct storm water drains and sanitary sewers in Dist. 50 and G-11, Storm Water Contr. No. 63; approximately 6400 ft. of sanitary sewers and storm drains from 8 to 42-in. in diam. together with the appurtenant structures; Bernard L. Crozier, Highways Engr.

Mo., Chillicothe—Details under Land Developments.

N. C., Asheboro—Details under Water Works.

N. C., Winston-Salem—Details under Water Works.

S. C., Spartanburg—Details under Land Developments.

Tex., Dallas—City Comsn. rejected all bids for the construction of addition to sewer system; will call for new bids; Louis Blaylock, Mayor.

Telephone Systems

Ark., El Dorado—Southwestern Bell Telephone Co., John W. Carter, local Mgr., main office, St. Louis, Mo.; will erect exchange building at Main St. and West Ave., has acquired site; equipment ordered; total cost approximately \$200,000; construction to begin about first of year.

Md., Baltimore—Chesapeake & Potomac Telephone Co., G. H. Warren, Div. Mgr., 5 Light St., will expend approximately \$150,000 for additions to the central equipment of the Forest and Vernon exchanges, including installation of switchboard equipment, etc.

Md., Frederick—Chesapeake & Potomac

Telephone Co., Paul I. Payne, local Mgr., main office Baltimore, Md., plans installing toll test board equipment; approximate cost 17,000.

W. Va., Wheeling—Chesapeake & Potomac Telephone Co., main office Baltimore, Md., will expend \$38,400 on installation of additional equipment, including one three-position section of local switchboard, equipped for 600 additional lines; with the installation capacity will be increased to 5640 lines, available for service.

Textile Mills

N. C., Asheville—Sayles Finishing Plants, Inc., Saylesville, R. I., reported to have acquired 200 acre tract of land on the Swannanoa River for erection of bleachery and finishing plant; J. E. Sirrine & Co., Archt. Engr., Greenville, S. C., is preparing plans; will also establish model mill village; total expenditure \$2,000,000.

Tenn., Memphis—H. L. Wellford, R. F. D. Station C. Route No. 3, contemplates erection of cotton mill.

Water Works

D. C., Washington—United States Engineer Office, 250 Old Land Office Bldg., opens bids Jan. 15, 1924, to construct filtration plant and pumping station sub-structure for Dist. of Columbia Water Supply Project.

Fla., Boynton—City let contract at \$30,000 to Keystone Construction Co., to install tower, pumping machinery and mains in connection with water works development; water system consists of elevated tank and tower, standing 125 ft. high, having capacity of 30,000 gals. and giving average pressure of 40 lbs. with capacity of 300 gals. per minute and system of water mains; 1 mile of 6-in., ¼ mile of 4-in. and 2½ miles of 2-in. and 3 miles of 1-in. piping. (Lately noted).

Fla., Fort Lauderdale—City voted \$100,000 bonds, including the following: \$45,000 for water extension; \$40,000 for street improvements; \$12,000 for dock and harbor improvements, and \$3000 for lot cleaning; Maxwell Baxter, City Atty. (Lately noted).

Fla., Madison—Town voted \$75,000 bonds for water main extension and street paving advises W. E. Algee, Sec. Madison County Chamber of Commerce.

Fla., Tampa—Details under Land Development.

Ky., Elizabethtown—City will receive bids until Dec. 17 for the following improvements: To construct 750,000 gal. gravity type filtration plant in 3 units; to furnish 4 centrifugal pumps and electric motors; bids to be received separately on furnishing and installing; B. H. Klyce, Engr., 720 Fourth and First National Bank Bldg., Nashville, Tenn.

Md., Baltimore—Board of Awards, C. F. Dolfield, City Register, will receive bids until Dec. 26 to construct pumping station No. 1 at Back River, sewage treatment works; Bernard L. Crozier, Highways Engr.

Md., Frederick—City, Lloyd G. Culler, Mayor, let contract at \$165,207.50 to Consolidated Engineering Co., Calvert Bldg., Baltimore, Md. for construction of new storage reservoir along Fishing Creek; Norton Bird & Whitman, Const. Engr., Munsey Bldg., Baltimore. (Lately noted as rejecting bids and calling for new estimates.)

Mo., Piedmont—City will vote on \$40,000 bonds for water works system. Address The Mayor.

N. C., Asheville—City, Arthur Ross, Mayor, opens bids Jan. 10 for water works improvements and sanitary sewer extensions, work embraces the following approximate quantities: 500,000 gal. filter and repairs to old filter; 30,000 gal. steel tank on 40-ft. tower of steel; 250,000 gal. concrete reservoir; 250

g. p. m. and 750 g. p. m. centrifugal pump; 200 ft. of 12-in., 1800 ft. of 10-in., 1600 ft. of 8-in., 26,082 ft. of 6-in. cast iron pipe; 13 tons special castings; three 12-in., two 10-in., five 8-in., thirty-six 6-in. gate valves; 45 valve boxes; 42 fire hydrants; 28,765 ft. of 8-in. sewers with appurtenances; 330 ft. of 10-in. sewers with appurtenances; two septic tanks; J. B. McCrary Engineering Corp., Engrs., Atlanta, Ga.

N. C., Greensboro—City let contract at \$231,281.50 to Lynchburg Foundry Co., Lynchburg, Va., for supplying more than 4000 tons of cast iron pipe for water works; contract for laying pipe line will be let Dec. 21; bids for other material not yet awarded.

N. C., North Wilkesboro—Town, will receive bids about Jan. 15, 1924 for water filtration plant also oil engine generator station complete with all necessary appurtenances; Carolina Engineering Co., Engr., 412 Southern Bldg., Wilmington, N. C.

N. C., Winston-Salem—Ray Johnson of Bon Air Realty Co., let contract to Boyd, Higgins & Goforth, Inc., of Charlotte, N. C., for extension of water and sewer lines on 29th, 30th and Bon Air Ave.

S. C., Newberry—City has engaged P. H. Norcross, of Atlanta, Ga., as consulting engineer for water works improvements; plans include installation of small intake weir on Bush River, construction of an electrically operated raw water pumping station, approximately 2½ miles of 12-in. force mains, raw water service reservoir, coagulating basin, filter plant and an electrically operated high service station; voted \$125,000 bonds. (Lately noted to vote).

Tex., Austin—City voted \$850,000 bonds including \$300,000 filtration, \$500,000 school and \$50,000 for incinerator; W. D. Yett, Mayor. (Lately noted.)

Tex., Beville—Details under Land Development.

Tex., Ranger—City will vote Jan. 15 on \$190,000 bonds for purchase of Ranger Water Works Co. and for improvements including filtration plant, new reservoir engine and pipe line replacements. Address The Mayor.

W. Va., Wheeling—City, John S. Butts, Mgr., acquired water lines of Wheeling Public Service Co., including lines in Woodsdale, Pleasant Valley and Elm Grove Dists.

Woodworking Plants

Ala., Birmingham—Birmingham Furniture Mfg. Co., incorporated by C. P. Nolan, C. E. Rice and others.

Ark., Batesville—Western Woodworks Co., E. H. Glenn, Denver, Col., leased property on Spring St., will move plant from Denver; manufacture mill work, office fixtures, etc.

Ark., Malvern—Van Veneer Co., will erect 96x210-ft. mill construction building, day labor; will install electric driven machinery including lathe clipper and grinder, 150 K. W., A. C. generator and several motors. (See Machinery Wanted—Generator, Motor; Lathe Clipper and Grinder.)

Ark., Paragould—Hunt Wholesale Grocery Co., J. C. Hunt, Pres.; loss \$250,000.

Ga., Austell—Austell Cabinet Co., Atlanta, Ga., will erect 75x400-ft. mill construction building; install woodworking machinery for manufacture of furniture; invite prices on engine, boiler, motors and machinery; address W. F. Collier, Const. Engr., Austell. (Lately noted.) (See Machinery Wanted—Woodworking Machinery; Boiler; Engine; Motors.)

Miss., Brookhaven—Brookhaven Box Co., capital \$10,000, incorporated E. W. and T. W. Rhymes and others.

Mo., Cabool—Roberts School Building completely destroyed.

N. C., Statesville—Eugene Morrison, Sr., will erect 2-story, 60x150-ft. plant at Diamond Hill plant, also large dry kiln and timber shed; install electrically driven machinery; to manufacture bank, office and store fixtures.

S. C., Greenville—Southern Bobbin & Spool Co., increased capital from \$100,000 to \$200,000.

Tex., San Antonio—Ed. Friedrich, 802 E. Commerce St., will erect \$30,000 building, light reinforced concrete; construction by day labor; will install woodworking machinery; manufacture store fixtures, billiard tables, etc.

FIRE DAMAGE

Ala., Boaz—Places of business of J. L. Pepper, C. L. Sixemore, Dr. L. I. Cooley and Mrs. E. C. Snellgrove.

Ala., Daphne—Residences of B. L. Randall and Jos. Aynsley; loss \$10,000.

Ark., Little Rock—Joyland Amusement Park, 11th and Summit Sts., loss \$60,000; E. P. Kemper, owner and Mgr.

Ark., Little Rock—J. C. Cole's store, filling station and dwelling; loss \$15,000.

Ark., Malvern—Van Veneer Lumber Co.'s plant; loss \$25,000.

Ky., Seebree—G. T. Carnal's flour mill.

Ky., Louisville—Marigold Clothing Co., Jefferson Cafeteria and Krausgill Piano Co.; loss \$38,000.

La., New Orleans—Newman Building, 3-story frame and brick structure, housing cotton firms of McFadden Co., Wm. T. Hardie, Malget Bros. and H. R. Gould; loss \$500,000.

La., Sibley—High School building and contents; loss between \$60,000 and \$70,000.

Md., Baltimore—Gambrell Grain Products Co.'s plant at 2123 Aliceanna St., loss estimated at \$100,000.

Md., Cowenton—M. T. Gambrell's summer residence.

Md., Ellicott City—Hazeldene Manor, residence of John C. Maginnis, Pres., Eureka Life Insurance Co., on College Ave.; loss \$35,000.

Mo., Neelyville—Alex Eastwood's grocery store and theater; loss about \$16,000.

N. C., Oxford—Casino Theater Bldg. owned by Jno. Young; loss \$50,000.

Okla., Elk City—Dixie store owned by L. Ginsberg of New York; loss \$127,000.

S. C., Walhalla—John D. Verner's store occupied by Moss & Ansel; loss \$15,000.

Tex., Brashear—Two-story brick school building; loss \$25,000.

Tex., Dallas—Rigsbee Electric Co., A. Ralph Rigsbee, Pres., 1809 Main St.; owned by Aldredge Estate; loss \$25,000.

Tex., Hebronville—Post Office building; address The Postmaster.

Tex., Laredo Hotel Plaza, 2-story brick building in center of Nuevo Laredo.

Va., Norfolk—Arbuckle Brothers' lumber sheds in South Norfolk; loss \$20,000.

Va., Norfolk—J. M. F. Trotter's Pharmacy owned by Lowenburg & Goodman Corp., loss \$30,000.

W. Va., Weston—Residences and stores of J. H. Foster and Albert Bailey and residence of Bud Foster, all at Homewood, near Weston.

Damaged by Storm.

Tex., Corsicana—One oil tank owned jointly by the Magnolia Petroleum Co. and the Texas Co., and one tank owned by the Humbel Oil & Refining Co.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

Ala., Decatur—Morgan County Post, American Legion, Jack Long, Commdr., plans to erect building.

Ala., Mobile—Young Men's Christian Assn., C. W. Hempstead, Pres., will inaugurate campaign for \$300,000 to erect building.

La., Monroe—Lion's Club, Rev. F. M. Freeman, Pastor, M. E. Church, South, and others, are interested in erection of \$15,000 Y. M. C. A. building.

Md., Baltimore—Knights of Columbus, Wm. S. Aumen, Jr., Pres., is having plans prepared by Geo. R. Callis, Jr., 611 American Bldg., Baltimore, for \$1,000,000 clubhouse, Madison and Cathedral Sts.; plans call for 130x150-ft. building with 300 sleeping rooms, meeting rooms, auditorium about 65x150x30 ft. and to seat about 2000, dining rooms and kitchen, swimming pool, gymnasium, running track, handball courts, etc.; may issue bonds to finance; construction will probably start in spring. (Previously noted.)

Md., Baltimore—Baltimore Lodge, No. 70, L. O. O. M., is making tentative plans for erection of \$500,000 temple.

Tex., Waco—Karem Shrine Temple, A. A. O. N. M. S., Box 1515, plans to erect \$300,000 to \$400,000 fireproof temple, 7th and Washington Sts.; probably reinforced concrete, steel and brick with tile roof; 105x165 ft., 4 or 5 stories, concrete, hardwood and tile floors, interior tile, metal doors, vaults, vault lights, ventilators, ornamental terra cotta, rolling partitions, steel sash and trim, wire glass, 1 freight and 2 passenger elevators; will install latest type heating plant; architect not selected and contract will not be let for 6 or more months. (Lately noted.)

W. Va., Charleston—Beni-Kadem Temple, A. O. O. N. M. S., have halted plans for erection of Shrine Mosque pending consideration of plan to erect \$1,000,000 Masonic Temple on Kanawha St. to accommodate all Masonic bodies; Judge Geo. W. McClintic, Judge A. S. Alexander, Chas. K. Payne, Geo. S. Laidley and Lloyd E. Smith, members of comm.

Bank and Office

La., Bastrop—Bastrop State Bank will receive bids until Dec. 28 for construction of 1-story brick bank building; plans and specifications from J. W. Smith, Archt., Monroe, La.

S. C., Greenville—Chamber of Commerce, Capt. W. P. Conyers, Pres., will probably start construction of 10-story brick, concrete and steel office building on Main St., within 60 days; Beacham & LaGrand, Archts., Greenville. (Previously noted.)

Tex., Lubbock—Sanguinet, Staats & Hedrick, Fort Worth, Tex., are reported to prepare plans for remodeling Lubbock State Bank.

Tex., Tyler—Citizens National Bank will open bids Jan. 1 for erection of bank and office building; 6 stories, mezzanine and basement; 5 upper floors for offices; cost \$225,000; Lang & Witchell, Archts., Dallas. (Lately noted.)

W. Va., Elkins—Citizens National Bank, H. G. Klump, Pres., plans to erect building during 1924.

Churches

Ala., Albertville—Baptist Church plans to erect building, construction to begin in early spring. Address The Pastor.

Ala., Samson—Christian Church plans to erect building on Broad St. Address The Pastor.

Ala., Woodlawn (Station Birmingham)—First M. E. Church, South, plans to erect Sunday school annex. Address The Pastor.

Ark., Waldo—Methodist Church plans to erect \$30,000 building. Address The Pastor.

Fla., Jacksonville—Grace Methodist Church, Rev. W. S. Gray, Pastor, will erect church building; parsonage to be erected at once under supervision of W. W. Swaim, Jacksonville.

Ga., Atlanta—Virginia Ave. Baptist Church will erect temporary building at Virginia Ave. and Ponce de Leon Place. Address The Pastor.

Ga., Dublin—Centenary M. E. Church, South, will consult architect and get plans about Jan. 1 for new building; probably brick construction. Address G. N. Rainey, 407 Smith St., Dublin.

Ga., Macon—First Presbyterian Church, John J. McKay, Chmn., Bldg. Comm., will probably begin construction early in 1924 on \$75,000 Sunday school building; 3 stories and roof garden, 49x111 ft.; install central heating plant; Dunwoody & Oliphant, archts., Macon.

Md., Baltimore—St. Thomas' P. E. Church Carswell and Taylor Sts., Homestead, Rev. Chas. E. Perkins, Rector, is having plans prepared for new building to be erected at Alameda and 31st St.

Md., Baltimore—First Baptist Church, Dr. J. E. Hicks, 1106 W. Lafayette Ave., and Dr. F. F. Briggs, 4107 Groveland Ave., Pastors, will open bids Jan. 3 for erection of brick, stone, steel and concrete building on Liberty Heights Ave.; cost \$200,000 to \$250,000; 130x140 ft., tile and slag roof, concrete and hardwood floors, concrete foundation, interior tile, metal doors, ventilators, ornamental terra cotta, steel sash and trim, 3 stories, steam heat, auditorium, 3 assembly rooms and about 50 classrooms; Clyde N. & Nelson Friz, Archts., Lexington Bldg.; engineers plans not drawn; following contractors have been invited to submit bids: Milton C. Davis & Son, 902 W. 36th St.; Consolidated Engineering Co., Calvert Bldg.; J. Henry Miller, Inc., Eutaw and Franklin Sts.; Cogswell-Koether Co., 406 Park Ave.; C. W. Littleton & Son, 4313 Liberty Hgts. Ave.; Price Construction Co., Maryland Trust Bldg.; M. A. Long Co., 1523 Munsey Bldg.; Benj. F. Bennett Building Co., 123 S. Howard St.; Tase-Norris Co., 903 Cathedral St.; John Cowan & Son, 17 E. Lafayette Ave., all Baltimore. (Lately noted.)

Md., Cambridge—First Baptist Church plans to enlarge building for Sunday school. Address The Pastor.

Miss., Aberdeen—Baptist Church contemplates erection of building. Address The Pastor.

Miss., Ripley—Christian Church has broken ground for brick veneer building. Address The Pastor.

Mo., Jefferson City—First Baptist Church, Hugh Stephens, Chmn., Bldg. Comm., is considering plans to erect new \$100,000 building

instead of remodeling present structure as lately reported; building to be Spanish type, 104x96 ft., with 30x50-ft. open court to be later enclosed for gymnasium, brick and stucco construction, tile roof, sub-basement for heating plant; L. B. Pendleton, Archt., St. Louis; construction will probably begin in spring.

Mo., Joplin—Bethany Presbyterian Church, 18th St. and Virginia Ave., S. T. Tamblin, Joe Belt and others, members of Finance Comm., is considering erecting building.

Mo., Joplin—First Congregation Church, Rev. J. W. MacCallum, Pastor, is considering enlarging building.

Mo., Maryville—First Methodist Church has completed tentative plans for erection of addition to building; 13 classrooms, 3 departmental rooms and gymnasium; will re-decorate and refinish present building. Address The Pastor.

Mo., Sedalia—Reorganized Church of Jesus Christ of the Latter Day Saints, Dr. C. W. Rogers, interested, has permit for erection of building to be completed by Feb. 1.

S. C., Cross Anchor—Baptist Church, Dr. C. M. Workman, Chmn., Plan Comm., will erect \$12,000 building.

S. C., Greenville—Hampton Ave. Methodist Church, Rev. H. O. Chambers, Pastor, purchased site, Rutherford St. and Stone Ave., and plans to erect building; construction to proceed in units.

S. C., Inman—First Baptist Church, J. B. Jumper, Chmn., Bldg. Comm., is having plans prepared by Casey & Fant, Anderson, S. C., for erection of \$40,000 building; ordinary construction, 2 stories, 70x90 ft., hollow tile, plaster board, metal doors, ventilators, rolling partitions. (Lately noted.)

S. C., Sharon—Presbyterian Church plans to erect building. Address The Pastor.

Tex., El Paso—B'Nai Zion Congregation will erect \$125,000 synagogue and social center on N. Mesa Ave., opposite Women's Club. Address Rabbi Roth.

Tex., Grand Prairie—First Methodist Church will erect \$15,000 brick building; John W. Westbrook, Archt., Dallas, Tex.

Tex., Gonzales—Baptist Church will have plans completed in few days for erection of 2-story and basement building; brick and frame, 34 x 60 ft., cement and pine floors, concrete foundation, slate roof cost about \$20,000; Will N. Noonan, Archt., 240 Moore Bldg., San Antonio. (Lately noted.)

Va., Petersburg—Grace Episcopal Church, T. F. Parsons, Vesteryman, plans to establish Mission Church in Walnut Hill.

Va., Strasburg—United Brethren Congregation plan to erect church. Address The Pastor.

W. Va., Bluefield—Christian Church is considering erecting building. Address The Pastor.

W. Va., Bluefield—Westminster Presbyterian Church plans to erect building on Albemarle St.; construction will probably begin in late spring. Address The Pastor.

W. Va., Huntington—Ohev Shalom Congregation, A. B. Solof, Chmn., Bldg. Comm., selected Meador & Handloser, Huntington, to prepare plans for \$175,000 to \$200,000 synagogue; construction will probably start by March 1. (Lately noted.)

City and County

Ala., Birmingham—Courthouse—Jefferson County, W. B. Copeland, member, Board of Commrs., selected H. B. Wheelock as architect for \$1,250,000 courthouse; construction will probably start in spring. (Previously noted.)

Fla., Daytona—Fire Station—City, Stanley C. Archibald, Mayor, has selected Jacob Espedahl as architect and supervising engr. for erection of \$10,000 fire station. (Bonds previously voted.)

Ga., Macon—Auditorium—City, B. J. Dasher, Chmn., Auditorium Comm., will probably have plans ready for contractors in Feb. and plan to let contract in March for erection of \$600,000 municipal auditorium on site of present structure, 1st and Cherry Sts.; Egerton Swartout, Archt., 18 W. 34th St., New York; Dennis & Dennis, Asso. Archts., Macon; Gunvald Aus Co., 244 Madison Ave., Engrs., New York. (Previously noted.)

Ky., Ashland—City Hall—City, Wm. Salisbury, Mayor, is considering erection of city hall.

La., Opelousas—City Hall—A. J. Perrault, Mayor, and Board of Aldermen will receive bids until Jan. 9 (extended date) for labor and materials to erect city hall, auditorium, library and city jail building, Bellevue and Main Sts.; plans and specifications from E. Leo Ball, Archt., Suite 1, Haas Bldg., Alexandria, La. (Lately noted.)

Md., Baltimore—Morgue—Board of Awards, Mayor Howard W. Jackson, Pres., rejected bids for erection of city morgue and will have present plans revised or new plans drawn and call for bids early in 1924. (Lately noted.)

La., Baton Rouge—City Hall—City, L. J. Ricaud, Commr. of Finance, City Hall, will receive bids until Dec. 26 for repairs and additions and improvements of present city hall; brick, stone and wood, edge grain pine and linoleum floors, metal doors, vaults, ventilators, tar and gravel built-up roof, low pressure steam heat; cost about \$50,000; plans and specifications from office Wm. T. Nolan, Archt., 213 New Redmond Bldg., Baton Rouge, or 1000 Canal-Commercial Bldg., New Orleans, La.; separate bids for heating and plumbing. (Lately noted.)

Mo., Joplin—Memorial Hall—Memorial Hall Advisory Board, K. W. Story, Chmn. of sub-comm. on architecture, will receive competitive plans until Jan. 21 from following architects for erection of \$250,000 structure: A. C. Marquis, Smith & Van Pelt, Stanley C. Flawn, Trueman Martinie, all Joplin; Carl Bowler, Kansas City; MacClaren Hetherington, Colorado Springs, Colo.; Study & Farrar, St. Louis, Mo.; Carl Bowler, K. H. Buckley, Edgar Bell, all Kansas City, Mo.; Coolidge & Hodgdon, 134 S. La Salle St., Chicago, Ill.; Arthur Beck, Independence, Kan.; Wm. Schmidt, Oklahoma City, Okla. (Lately noted.)

N. C., Sylva—Home—Jackson County Board of Commrs., T. A. Raymond, Chmn., will receive bids until Jan. 7 for construction of county home on county farm; 18 rooms and basement, 2 stories; brick; C. H. Chunn Archt., West Asheville, N. C.; plans and specifications may be seen at office Raymond R. Nicholson, Register of Deeds, Sylva.

N. C., Leaksville—City Hall—City has low bid from L. B. Flora, Danville, Va., for erection of brick, terra cotta, wood and steel city hall building; cost about \$40,000; 50x100 ft., 2 stories and basement, Barrett specification roof, hardwood and concrete floors, ornamental terra cotta, ventilators, vaults, steam heat; Jas. W. Hooper, Archt., Leaksville. (Previously noted.)

Tex., Dallas—Municipal Auditorium—City, Harvey S. Trewitt, member, Park Board, is considering tentative plans for erection of municipal auditorium and advises Manufacturers Record, "It is our intention to erect building with seating capacity of 15,000 at cost of approximately \$500,000; believe definite plans will be worked out in early spring."

W. Va., Bluefield—City Hall—City, Clarence E. Ridley, City Mgr., will probably receive bids about Jan. 20 for erection of city hall building; cost \$175,000; 130x100 ft. masonry walls, concrete floor slabs, built-up roof, Wilbur T. Mills, Columbus, O., and Garry & Sheffey, Bluefield, Asso. Archts. Address Mr. Mills. (Lately noted.)

Dwellings

Ala., Jasper—Pratt-Warrior Coal Co. plans to erect 25 miners' dwellings at Ivy Bluff Mines on Warrior River, southern part of Walker County, operated by Gulf States Portland Cement Co., Demopolis, Ala.

Fla., Fort Lauderdale—Peterman & Hargrove, Archts., Fort Lauderdale, are preparing plans for erection of residence in Venice sub-division.

Fla., Fort Lauderdale—C. G. Rhodes has begun work on foundation of Spanish type stucco residence in Venice sub-division; Peterman & Hargrove, Archts., Fort Lauderdale.

Fla., Miami—B. E. Rainey has plans by August Geiger, Miami, for erection of \$15,000, 2-story, concrete block and stucco residence in Grove Park addition.

Fla., St. Petersburg—St. Mary's Catholic Church is having plans prepared by Henry Taylor, St. Petersburg, for erection of \$15,000 rectory.

Fla., South Jacksonville (Ind. Branch Jacksonville)—D. J. Carrinson has plans by Mark & Sheftall, Jacksonville, for erection of residence in Hollywood addition; Colonial type, 2 stories, 7 rooms.

La., Shreveport—I. Rosentrauch is receiving bids for erection of 2-story residence; 40x45 ft., face brick, steel construction, gum finish, 2 tile baths, electric wiring; Seymour Van Os, Archt., Merchants Bldg., Shreveport.

La., Shreveport—Mrs. Fannie A. Ross will erect \$10,000 two-story residence and garage, 315 E. College St.

Md., Baltimore—Jos. N. Selfert, 321 Gittings Ave., will erect 2½-story frame dwelling, south side Cedarcroft Rd. near Walnut Ave.; cost \$10,000, about 35x24x32-ft.

Md., Baltimore—Herman Scheer and associates, plan to incorporate and erect about 400 two-story brick dwellings in connection with development of old Gentlemen's Driving Park, Belvidere Ave. and Pimlico Rd.; cost about \$6000 each; 6 to 8 rooms; also plan to erect number of duplex apartment houses; construction will probably begin in spring.

Md., Baltimore—Claud Boothroyd will erect \$12,000 residence, south side Oakley Ave., east of Lanier Ave.; 2 stories, 30x44x26 ft., frame.

Md., Baltimore—Rochester Home Building Co., 3600 Old York Rd., will erect 100 two-story brick dwellings, 700-48, 701-49 E. Melville Ave. and 700-48 and 701-49 E. 36th St.; total cost \$200,000.

Md., Baltimore—City & Suburban Realty Co., Harford Rd. and Hamilton Ave., will erect seven 1½-story frame dwellings, west side Walnut Ave. north of Beechland, N. E. cor. Fair Oak and Beechland Aves., north side Hemlock Ave., west of Glenmore Ave., N. E. cor. Beechland and Walnut Aves., east side Blackwood Ave. south of Beechland, and South side Hemlock north of Glenmore; total cost \$23,000.

Md., Baltimore—John J. Dubbelde, 728 N. Howard St., will erect 10 two-story brick dwellings, S. E. cor. Ellamont St. and Gwynn's Falls Pkwy.; about 20x34x25 ft. each; total cost \$45,000.

Md., Baltimore—Vaughn L. Insley, 3125

McElderry St., will erect 3 two-story frame dwellings, S. E. cor. Evergreen and Holly Aves.; 24x26x10 ft.; total cost about \$10,000.

Md., Baltimore—Henry P. Malkus, 1604 N. Port St., will erect 2 two-story concrete dwellings, N. E. cor. Belair Rd. and Powell Ave.; 19x40x25 ft.; total cost \$12,000.

Miss., Hazlehurst—Ellis T. Allen will erect bungalow in North Hazlehurst.

Miss., Hazlehurst—S. L. Allen will erect bungalow in North Hazlehurst.

N. C., Charlotte—C. H. Smith will erect \$12,000 six-room stucco residence in 300 block W. 10th St.; M. E. Boyer, Archt., Charlotte.

N. C., Charlotte—F. E. Harlan will erect 3 five-room dwellings, 211-13-15 Rensselaer Ave., Dilworth; total cost \$10,500.

Okla., Enid—Maud W. English will erect \$10,000 two-story frame building in Kenwood addition.

S. C., Spartanburg—P. S. Cecil will erect two \$7000 old English type dwellings on Irwin Ave.; 2 stories, 7 rooms; also plans to erect number of dwellings off Hampton Drive on 4½-acre site recently purchased.

Tex., Dallas—Dines Building Co. will erect \$10,000 seven-room, brick veneer cottage, 712 Ridgeway St.

Tex., San Antonio—A. M. Dalavan will erect \$10,000 residence, Agarita Ave. and Blanco Rd.; 1-story, frame; Allee B. & Robt. M. Ayres, Archts., will probably have plans completed within 60 days.

Tex., San Antonio—H. M. Merriweather, 112 Douglas Way, will erect residence, New Braunfels Ave. near Blue Bonnett St.; 2 stories, metal lath, plaster walls, etc., cost \$10,000; will soon select architect.

Tex., San Antonio—Henry Pancoast will have plans out about Jan. 1 for erection of \$11,000 residence, Elizabeth Rd., Terrell Hills; modified English type, plastered walls, etc.; Richard Vander Stratten, Archt., 3rd floor, Hicks Bldg., San Antonio.

Tex., San Antonio—J. E. Pennington, 225 E. Park Place, will erect 16 cottages on Givens, Cass and Alvarez Sts.; 4 and 5 rooms, frame; construction to start about Feb. 1.

Tex., San Antonio—O. L. Fortman will call for bids shortly after March 1 for erection of 2-story brick residence in Monte Vista; cost \$10,000; Will N. Noonan, Archt., Moore Bldg., San Antonio. (Lately noted.)

Tex., San Antonio—Dave Lehr, 2525 Monterey St., contemplates erecting residence on Mulberry Ave. near Fredericksburg Rd., Woodlawn Place.

Tex., San Antonio—Lawrence I. Peak contemplates erecting residence on E. Ashby Place near Jones Ave.

Tex., San Antonio—Perry S. Robertson, Bedell Bldg., will erect residence on Oleander St. off Van Ness St.

Va., Richmond—Chas. H. Phillips will erect \$30,000 three-story brick dwelling; Floyd Ave., near Sheppard St.

W. Va., Fairmont—Owens Bottle Co., W. O. Amsby, Constr. Engr., states no dwellings will be erected as lately noted.

Government and State

D. C., Washington—Barrack Buildings and Boiler House—Constructing Quartermaster, Room 1304, Munitions Bldg., Washington, will receive bids in triplicate until Dec. 21 for wrecking and salvage of 18 frame buildings in East Potomac Park, D. C., and construction of 2 barrack buildings and boiler house at Bolling Field, D. C.; plans and specifications from office Constr. Quartermaster.

Ga., Atlanta—Village—Juvenile Protective Assn., H. J. Langston, Field Sec., Atlanta, is interested in erection of \$100,000 Junior

Republic of the South, model village for wayward boys and girls; \$25,000 is being raised in Atlanta, remainder by popular subscription throughout the South; construction will probably begin during 1924.

Tenn., Chattanooga—Armory—City, Emil Wassman, Commr. of Public Utilities, Grounds and Buildings, City Hall, will receive bids until Dec. 21 for erection of armory for Chattanooga National Guard Cavalry Squadron, J. P. Fyffe, Col. 709 Chesnut St.; \$22,000 appropriation available; revised plans and specifications from Crutchfield & Gosnell, Archts., 1241 Volunteer Bldg., Chattanooga. (Lately noted.)

Hospitals, Sanitariums, Etc.

Ala., Birmingham—Birmingham Baptist Hospital, Dr. J. M. Long, Supt., plans to start construction by Jan. 1 on first unit of \$400,000 U-shape addition to present structure; 5 stories, brick and concrete, fireproof; offices, X-ray rooms, laboratories, patients rooms, etc.

Ark., Par's—Dr. J. H. Jewell will erect \$85,000 brick and stone hospital on N. Elm St. after plans by John Freise, Paris; 2 stories, 42x53 ft., oak floors, stone basement, hollow and interior tile, metal ceilings, hardwood and concrete floors, plaster board, steam heat, 1 elevator; excavation begun; date of opening bids not set. (Lately noted.)

Miss., Magee—Hinds County Board of Commrs., W. S. Wells, Chancery Clk., Jackson, Miss., will receive bids until Jan. 9 for erection of Hinds County Unit at State Tubercular Hospital; bids for county to furnish material and also for contractor to furnish all material.

Okla., Oklahoma City—Board of Directors, W. B. Kennedy, Pres., care T. H. Rogers Lumber Co., plans construction of proposed \$1,000,000 Ku Klux Klan Hospital by March 1; Breck Moss, member of Board of Directors, in charge of building. (Lately noted.)

Tenn., Chattanooga—Pine Breeze Sanatorium, Dr. Margaret White, Supt., plans to erect 2-story bungalow type nurses' home.

Tenn., Oakville—Memphis and Shelby County have plans about complete by Jones & Furbinger, Memphis, for erection of 2-story building at Oakville Memorial Sanatorium, Jas. A. Price, M. D. Supt.; concrete and tile, 130x66 ft., concrete floors and foundation, asbestos shingle roof, hollow and interior tile, ventilators; contract not let. (Lately noted.)

Tex., Fort Worth—City, Mayor Cockrell, and Tarrant County may call \$500,000 city-county hospital bond election. (Previously noted.)

Tex., Wichita Falls—State Board of Control, S. B. Cowell, Chmn., Austin, advised contract not let for nurses' dormitory at Northwest Texas Hospital for Insane as low bid exceeded appropriation; Volcker & Dixon, Archts., 500 Morgan Bldg., Wichita Falls. (Lately noted.)

Va., Galax—Dr. J. K. Caldwell and others will erect hospital; install equipment, including X-ray.

Va., Richmond—Johnson-Willis Hospital, Kensington Ave., near Colonial Ave., is considering erection of nurses' home.

Hotels and Apartments

Mo., Jefferson City—Ed Kuehn will remodel and rebuild the Southside Hotel on Dunkin St. at cost of \$15,000; upper stories to be converted into 8 efficiency apartments, and ground floor into storerooms.

Tenn., Knoxville—Caldwell & Co. has plans by Barber & McMurray, Knoxville, for erection of fireproof, 6-story and basement Laurel Heights Apartment; cost \$152,000; solarium on roof; reinforced concrete, gypsum blocks, hollow tile floors, brick and stone; 24 apartments each with 5 rooms, reception hall and bath; bonds being sold for financing project.

Tenn., Memphis—Turner Construction Co., 140 Peachtree St., Atlanta, Ga., are bidding on proposed erection of \$3,500,000 hotel for Southern Hotel Co. (W. T. Halliday & Asso.) noted in detail Nov. 22.

Tex., Amherst—Stanley Watson, Mgr. of the Hassell farm lands, has plans by Peters & Haynes, Lubbock, for erection of \$40,000 brick hotel.

Tex., Cleburne—R. A. Johnson, Mgr., Liberty Hotel, Jacksonville, Tex., proposes erecting 4-story hotel to cost \$100,000; 65 guest rooms; lot at James, South Caddo and South Anglin Sts., has been donated; project is backed by Chamber of Commerce, Otto Foster, A. J. Wright and others, members of hotel comm.

Tex., Dallas—J. L. Hofus will erect 32-room brick veneer apartment at 4422 Sycamore St. to cost \$30,000; 8 apartments.

Tex., San Antonio—Clarence Garrett, Secy. of Medical Arts Bldg., of San Antonio and others selected Ralph H. Cameron, 1115 City National Bank Bldg., to prepare plans for erection of 12-story Tourist Hotel on Houston St. and Avenue E, to cost \$1,500,000; reinforced concrete, brick and stone; about 600 rooms with bath.

Tex., San Antonio—Atlee B. & Robt. M. Ayres have been selected to draw plans for erection of \$1,000,000 Suburban Tourist Hotel 8 miles north of San Antonio; names of owners withheld; fireproof, 500 guest rooms with bath, 4 stories, brick and concrete, in shape of letter "H."

Va., Bristol—Hardin Reynolds has purchased lot on Cumberland St. between Lee and Moore Sts., and contemplates erection of an 8-story hotel; cost about \$300,000; 108 ft. frontage, 120 ft. east side and 165 ft. west side; 200 or more rooms; C. B. Kearfott, Archt., Bristol.

Miscellaneous

Ala., Auburn—Sigma Alpha Epsilon Fraternity will erect \$35,000 house on Fraternity Row; 2½ stories, brick, tile porches and baths, steam heat; Hickman & Martin, Archts., Columbus, Ga.

Ala., Tusculumbia—Club house—Tennessee Valley Country Club will issue \$15,000 bonds for further improvements.

D. C., Washington—Jewish Foster Society, Mr. Nordlinger, Chmn., is having plans prepared by Milburn, Heister & Co., Washington, D. C., and Durham, N. C., for remodeling building.

D. C., Washington—Memorial—Harding Memorial Association, President Calvin Coolidge, honorary president; Jos. Frelinghysen, acting president, entered campaign to raise \$3,000,000 for erection of a memorial for Warren Gamaliel Harding; offices at Central National Bank, Washington, or Hon. Andrew W. Mellon, treasurer Harding Memorial Association, 1414 F. St., N. W., Washington, D. C.

Fla., Fort Lauderdale—Casino—J. A. Portwood and others plan to erect \$100,000 casino at Las Olas Beach; to include convention hall, swimming pool, dance floor, etc.

Fla., Miami—South Florida Amusement Co. plans improvements to cost \$250,000.

Fla., Tampa—Fair buildings—South Florida Fair, P. T. Strieder, Gen. Mgr., plans erection of additional buildings at Fair.

La., Mandeville—Clubhouse—St. Tammany Yacht Club has plans by R. Spencer Soule, 429 Carondelet St., New Orleans, for erection of a clubhouse and wharf to cost \$35,000; 2-story, frame and stucco, to contain swimming pool, gymnasium, auditorium, lockers, etc.

La., Shreveport—Home—Board of Directors, Old Ladies' Home, Jordan St., Mrs. J. B. Blatterman, Pres., plans \$15,000 brick addition.

Md., Baltimore—Henry L. Frank & Co., 37 South St., agents for the 3 Donnell Bldgs., at 32-42 S. Paca St., will expend over \$50,000 for improvements; 175x135 ft.; 6 stories; will be leased for industrial purposes.

Mo., Joplin—Clubhouse—Park Board will soon let contract for erection of clubhouse at Shifferdecker Park; cost \$10,000; 2 stories, tile reinforced concrete and stucco.

N. C., Raeford—T. B. Upchurch will erect 40x60-ft. brick building; slate roof, heart pine, hardwood and concrete floors, hollow tile; steam heat, \$1500; electrical work, \$750; plans not drawn and contract not let. (See Mch. Wanted—Woodworking Machinery.)

N. C., Wilson—Wilson Woman's Club, Mrs. Eugene Davis, Pres. appointed committee composed of Mrs. G. A. Barfoot and Mrs. W. W. Simms to investigate site for erection of clubhouse.

Okla., Frisco—Orphanage—Choctaw-Chickasha Baptist Assn. plan to convert Collins Institute, near Frisco, Pontotoc County, into an Indian Orphanage.

S. C., Clinton—Home—Clayton Orphanage, J. D. Prigden, Chmn. Board of Trustees, entered campaign to raise \$100,000 for erection of new building at orphan home; Knights of Pythias are backing campaign.

Tenn., LaFollette—Coal & Iron Workers Benefit Club, Harry Noyes, Pres., has plans by Manley & Young, Knoxville, for erection of \$10,000 clubhouse for employees; 118x50 ft.; concrete and frame; asphalt shingle roof; maple floors; warm air furnace, cost about \$600; steel sash and trim. (Lately noted.)

Tex., Dallas—Park—E. E. Harrington and others plan erection of amusement park to cost \$1,000,000 on 65-acre tract 2 mi. from Dallas; will include swimming pool, dance hall, aerial railway, etc.

Tex., Fort Worth—Auditorium—American Building Corp. H. P. Sandridge, Pres., plan to erect \$50,000 steel, brick and tile auditorium on Main St.; 100x200 ft.; Earl T. Glasgow, Archt., Fort Worth.

Tex., San Antonio—George Willis, Archt., Chandler Bldg., will prepare plans for remodeling Chandler home on West French Place, to accommodate aged ladies, will include addition of 26 rooms, and general remodeling of interior and exterior; plans ready for contractors within 60 days; Mrs. R. S. Ragsdale, Supt.

Va., Richmond—Club House—The University Club, Bernard Meridith, Pres., and T. R. Dew, Sec., approved organization of a holding company, known as College Men's Corp., capital stock \$100,000, to finance new club to be erected at 827 W. Franklin St.

Va., Richmond—Home—Masonic Home Committee, Jos. T. Houck, Harrisonburg, and others, plan improvements to Masonic Home on road to Highland Springs and Seven Pines, including enlarging dining rooms and fireproofing entire structure.

Railway Stations, Sheds, Etc.

Ark., Jonesboro—Cotton Belt System of St.

Louis Southwestern Rwy. Co., W. S. Hanley, Ch. Engr., Tyler, Texas, has plans and specifications for remodeling and enlarging Union station; flagman's house will be erected between tracks of Cotton Belt and Frisco roads at Main St. crossings.

N. C., Winston-Salem—Southern Rwy. Co., Henry W. Miller, Vice-pres., Washington, D. C. has plans for erection of passenger station to cost \$700,000.

Hotels and Apartments

Ark., Fayetteville—Mrs. Edna Brashears plans remodeling frame hotel building; cost not stated.

Fla., Miami—Dr. D. E. Shehan has plans by E. L. Robertson and L. R. Patterson, 210-11 Calumet Bldg., Miami, for erection of \$175,000 hotel; 40x120 ft.; 7 stories; reinforced concrete floors, composition roof, hollow tile, interior tile, metal doors, mail chutes, ventilators, steel sash and trim, wire glass, elevator.

Fla., Miami—Samuel Phillips plans erecting 2-story, concrete block, stucco apartment house on S. W. Ninth Ave., to cost \$10,000; 4 apartments.

Fla., Miami—J. Santon plans erecting 3-story apartment house at 54 N. E. Fifth St., to cost \$40,000; 86 ft. frontage; concrete construction and will contain 14 apartments.

Fla., Miami—C. F. Archer, Panama Canal Zone, has plans by J. C. Gault, for erection of 2 concrete block apartment houses at N. W. Fourteenth Ter. and Fourth Ave.; cost \$30,000; 2 stories; building on corner will have store room with five 4-room apartments above, other six 4-room apartments.

Fla., Miami Beach—H. S. Steinhauser, Atlantic City, plans extensive improvements to Ruby apartments including removal of store building and erection of garage and laundry; also additional apartment house adjoining Ruby; also plans erection of hotel to contain 120 to 150 rooms.

Fla., Pablo Beach—Gene Zapf plans erection of a 112-room fireproof hotel.

Fla., Pensacola—Pensacola Apartment and Theater Co., W. B. Harbeson, Pres., plan erection of apartment hotel and theater building to cost \$700,000; 6 stories, 154x196 ft.; fireproof, Spanish design, 93 apartments; 6 store rooms and lobby of theater will occupy ground floor, tea rooms, etc., theater will seat 1500; C. W. and Geo. L. Rapp of Chicago are preparing final plans and specifications.

La., Shreveport—H. C. Potter has plans by E. A. George, 1426 Abble St., for erection of 4-suite apartment building at 726 Grand Ave.; brick, 2 stories, 40x70 ft., J. M. roof, pine finish, plaster, oak floors, tile vestibule.

Md., Baltimore—Cooperative Apartments Co., will erect 4-story brick and stucco apartment house at 102 W. Thirty-ninth St.; cost \$75,000; 78.10x52.4 ft.; 8 suites, 6 rooms and 2 baths each; Ray G. Pratt, Archt., 323 N. Charles St., Baltimore.

Md., Baltimore—Harry W. Lee has purchased 1309 N. Calvert St. and will convert into apartments; 18x95 ft.; 4-story stone building containing 10 rooms and 2 baths.

Mo., Kansas City—Chas. E. Philips plans to start erection about March 1st, of \$300,000 hotel on southeast corner Forty-sixth and Main Sts.; 100 suites; 4 stories; Spanish design.

N. C., Asheville—Dr. E. W. Grove, St. Louis, plans erection of 13-story hotel to replace Battery Place Hotel; cost \$600,000; 90x100 ft.; 230 rooms; W. L. Stoddart,

Archt., 9 E. 40th St., New York; J. M. Geary, Construction Engr., Asheville. (Lately noted.)

N. C., Asheville—T. V. Shannon, Chicago, Ill., is having plans prepared by Ronald Greene, Asheville, for erection of \$150,000 apartment house; 3 or 4 stories, 12 to 18 apartments.

N. C., Wilmington—Seashore Hotel Co. plans addition of 50 rooms on north side of present structure.

S. C., Greenville—Greenville Community Hotel Corp., Jno. T. Woodside, Pres., has been organized and plans erection of a 11-story hotel on corner Main and Court Sts., to cost about \$1,000,000; 210 rooms with bath, first floor for stores; expect plans to be completed about middle of Jan. and bids will then be received; Wm. L. Stoddart, Archt., 50 East 41st St., New York City. J. E. Sirrine, Asso. Archt., Greenville, S. C. (Lately noted.)

Schools

Ala., Birmingham—County Board is carrying out building program of second group of schools to be constructed to include high schools at District 7 corner Leeds and Oak Grove; elementary schools at Bradford, Center Point, Concord, Highlands, Pinson, Brighton, Irondale, Inglenook, Tarrant City (Colored), Leeds and Zion City.

Ala., Birmingham—County Board of Education plans erection of high school in District 6, to cost about \$35,000.

Ala., Montgomery—Building Committee, Dr. Walter D. Agnew, president of the college, Chmn., has plans by Frank Lockwood, Montgomery, for erection of Weenona Hanson Hall, the new dormitory for Woman's College; will be adjacent to Pratt Hall and connected by fireproof stairway; cost between \$90,000 and \$100,000; 3 stories, will contain 50 rooms, reception room, lobby, etc.

Ala., Talladega—Board of Education has plans by R. H. Hunt, Archt., of Chattanooga, for erection of high school building and athletic field; contract will be let about Mar. 1.

Ala., University—Christian Church Board will expend \$750,000 for establishing a regional school of religion at the University; to include 3 buildings at \$250,000, and \$500,000 endowment.

Ark., Fayetteville—Board of Education plans erection of junior high school building to cost between \$50,000 and \$75,000.

Ark., Helena—Board of Education, A. Davis, Supt., have plans started for erection of school building to cost \$74,000; \$35,000 bond issue contemplated.

Ark., Pine Bluff—Board of Education, Judge J. L. West, Pres., Board of Directors, plans erection of brick school at Watson Chapel and school for negroes between White school and Pine Bluff.

Fla., Gainesville—Board of Control, P. K. Yonge, Chmn., Aragon Hotel, Jacksonville, is having plans prepared for erection of first unit of building for University of Florida to cost \$100,000; completed building will cost about \$500,000; 2 stories and will contain reading room, offices, consultation room, etc.

Fla., Geneva—Board of Public Instruction, Seminole Co., Sanford, Fla., T. W. Lawton, Supt., plan erection of brick and concrete school building; cost about \$15,000; 4 rooms and auditorium, composition roof; E. J. Moughton, Archt. Sanford; bids open Dec. 18; Address Supt.

Fla., Ocala—Subschool District will vote Jan. 15 on \$100,000 bonds; will expend \$90,000 on high school building, \$5000 on grounds and \$5000 on improvements at Howard Academy. (Lately noted.)

Fla., St. Augustine—Board of Education has selected the following architects: Fred A. Henderich to prepare plans for Hastings High School, and Junior High School for negroes in St. Augustine; F. A. Hollingsworth for St. Augustine High School and New Augustine Grammar School; Henry McCarrel, for remodeling present high school building; will use proceeds of \$300,000 bond issue, voted last summer. (Previously noted.)

Fla., Seabreeze—School Board recommended to county board the purchase of lot upon which to build grammar school.

Ga., Atlanta—Georgia School of Technology, Dr. M. L. Brittain, Pres., will erect Ceramics Building; plans by faculty of Department of Architecture, Georgia School of Technology; R. J. Thiesen, Secy. National Alumni Assn., Georgia School of Technology, Atlanta.

Ga., Valdosta—Methodist Episcopal Church, South, 1115 Fourth Ave., Louisville, Ky., plans moving junior college for boys, from Sparks, Ga. to Valdosta. Address Rev. Nathan H. Williams, Valdosta.

Ky., Lexington—University of Kentucky will erect \$120,000 stadium.

Ky., Paducah—Arcadia School District voted \$20,000 bond issue for school building at Arcadia; brick; 6 rooms, gymnasium and auditorium. (Lately noted.)

La., Baton Rouge—State Agricultural College will soon call for bids for erection of Mechanics and Engineering building to cost \$350,000; State Archt.

La., Baton Rouge—Louisiana State University, Jack T. Laycock, member of building committee, will receive new bids on \$75,000 concrete stadium; seating capacity 12,000. (Lately noted—all bids rejected.)

La., Pitkin—School Board is having plans prepared by F. W. Steinman & Son, Beaumont, Tex., for erection of \$75,000 high school building; will have own electric lighting plant; auditorium.

La., Shreveport—M. E. Dodd Foundation of Shreveport, has been organized to receive funds for a proposed Baptist woman's college; committee has property purchased for \$125,000 and valued at \$150,000 and \$75,000 cash which will be given to Baptists of the State. (Lately noted.)

Maryland—State Board of Education, Albert S. Cook, State Supt. of Education, plans expenditure of approx. \$13,000,000 during 1925, 1926 and 1927 for public schools of Maryland to provide for larger high school enrollment, increased attendance in elementary grades, more nearly adequate allowance for free textbooks and materials of instruction, extension of vocational and health education, to aid poorer counties in meeting requirements of State school law, support State Dept. of Education and State Normal School at Towson, Frostburg, Salisbury and Bowie.

Md., Baltimore—Board of Awards, Howard W. Jackson, Pres., will receive bids until Dec. 26 at office of Frederick A. Doldfield, City Register, City Hall, for painting and plastering in Montebello School, Harford Ave. and Thirty-second St.

Md., Baltimore—Board of Trustees, Archbishop Curley, Pres., contemplate erection of administration building for St. Mary's Industrial School; cost between \$400,000 and \$500,000.

Miss., Itta Bena—Leflore County Board of Education will vote on bond issue soon to determine erection of Agricultural High School for the Colored.

Mo., Martinsville—School Board announces

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

\$18,000 bond issue for new school building, failed for second time to carry; will vote again in near future.

Mo., Steelville—School Board plans erection of \$35,000 high school pending voting of bonds.

N. C., Charlotte—H. B. Hardin, Supt., City Commissioners, wires Manufacturers Record: "Bond election failed to carry." (Lately noted voting of \$2,000,000 bonds for extensive improvements to schools.)

N. C., Clemmons—County Board of Education plans erection of school building.

N. C., High Point—Methodist Protestant College, is having plans prepared by Herbert Hunter, High Point, for erection of 2 dormitories; each will cost about \$100,000 and accommodate 100 students. (Lately noted.)

N. C., Mars Hill—Mars Hill College, R. L. Moore, Pres., will expend \$100,000 for erection of dormitory for girls; received \$50,000 from Baptist State Convention and \$50,000 from a friend.

N. C., Method — North Carolina Baptist Convention will issue \$750,000 bonds for financing the re-location and establishment on a larger scale of Meredith College, on site recently purchased at Method, several miles from Raleigh; work on \$1,000,000 project to start in Spring.

N. C., Raleigh—Bd. of Education of Wake County, Jno. C. Lockhart, Secy., will receive bids until Jan. 7 for erection of addition to Wendell High School; separate bids on heating and plumbing; J. M. Kennedy, Archt., Raleigh, N. C.

N. C., Rockingham—State plans to erect negro reformatory on 400-acre trace in Richmond County. Address The Gov.

N. C., Rutherfordton—Board of Education plans erection of \$200,000 consolidated high school to be centrally located and serve Rutherfordton, Ruth and Spindale; will hold election Jan. 26 to vote on special tax and \$200,000 bonds.

N. C., State College (Sta. Raleigh)—Building Committee will expend \$55,000 for erection of power plant at State College.

S. C., Columbia—Presidents of State educational institutions and Gov. Thos. G. McLeod, propose \$12,000,000 bond issue for public schools and all State educational, penal and charitable institutions; \$2,000,000 of proposed bond issue will be used for public schools and rest for State institutions.

S. C., Greenville—Greenville Woman's College Alumnae, Mrs. Carpenter, Pres., plans erection of \$20,000 library at conclusion of campaign and a \$500,000 endowment campaign within few years.

S. C., Lykesland—County Board of Education, G. M. Eleazer, Supt., Columbia, rejected all bids to erect high school, may refigure later; Jas. B. Urquhart, Archt., 607 Palmetto Bldg., Columbia.

S. C., Walterboro—School Commission, M. P. Howell, Chmn., will receive bids until Jan. 3 (extended date) to erect high school; Jas. B. Urquhart, Archt., 607 Palmetto Bldg., Columbia, S. C. (Lately noted to open bids Oct. 16.)

Tenn., Nashville—Saint Dominique has purchased 165 acres at a cost of \$180,000, and plans additions, including memorial chapel and enlarging St. Cecilia Academy; construction will start in spring.

Tex., Austin—City voted \$500,000 school bonds. W. D. Yett, Mayor. (Lately noted.)

Tex., Austin—University of Texas is having preliminary sketches prepared by Herbert M. Green Co., North Texas Bldg., Dallas, for erection of athletic stadium to seat about 40,000; cost about \$500,000; campaign for financing proposed project to start soon.

Tex., Austin—Methodist women of Texas are promoting erection of dormitory for Methodist co-eds at the University of Texas according to Mrs. T. A. Brown, cost \$125,000; brick, 3 stories and basement, accommodate 100 girls, each room will be double with built-in furniture and lavatories with hot and cold water.

Tex., Corpus Christi—Adams Independent School District contemplates erection of school building.

Tex., Fort Worth—Texas Christian University of Fort Worth was given \$413,000 by Mrs. Mary Couts-Burnett; \$150,000 will be expended for erection of library building, work to start immediately.

Va., Falls Church—Arlington School Bd., Prof. Fletcher Kemp, has not selected site for junior-senior high school for Arlington and Washington districts; cost about \$185,000; also plans to erect 3 elementary schools. (Lately noted.)

Tex., Galveston—Board of Regents of University of Texas will receive bids until Jan. 14, for erection of 4-story and basement fireproof laboratory building in connection with Medical Branch of University of Texas at Galveston; in 3 contracts; general, plumbing and heating; cost about \$300,000; cement, concrete, tile and magnesite flooring; tile roof; 143x79.6 ft.; hollow tile, interior tile, metal doors, ventilators, ornamental terra cotta; Herbert M. Greene Co., Archts., North Texas Bldg., Dallas, Tex. (Lately noted.)

Tex., Greenville—George Clarke, Principal, announces that plans for immediate reconstruction of Brasher Public School, recently burned at loss of \$35,000, are being made.

Tex., Lubbock—W. C. Hedrick of Sanguiet, Staats & Hedrick, Archts. & Engrs., Fort Worth, advises Manufacturers Record in regard to proposed \$850,000 State Technological College: "Board of Regents, headed by its Chairman, Mr. Amon G. Carter, Mr. Clifford B. Jones and Mr. Jno. W. Carpenter, Mr. Carter of Fort Worth, Mr. Jones of Spur, and Mr. P. W. Horn, their new president, with one of our firm, one of Mr. Wm. Ward Watkin's firm and one from Robert & Co., will tour the east, middle west and perhaps the west coast, starting Jan. 15th, visiting the various Technological, Engineering and Agricultural colleges, to see what should be and is necessary to incorporate in this school, and from this data, the Architects will formulate plans, and we hope to be ready to take bids probably sometime between May 1st and June 1st, and get the work started as soon thereafter as possible." (Noted Dec. 13.)

Tex., Marshall—School Board has selected W. G. Clarkson & Co., Fort Worth, to prepare plans of high school and negro school to cost \$230,000; brick, stone, reinforced concrete; fireproof. (Lately noted.)

Tex., Port Arthur—School Trustees are having plans prepared by Wm. B. Ittner, Archt., St. Louis, Mo., for erection of \$50,000 brick school building at Griffing; site donated by W. C. Tyrell.

Tex., Seabrook—Harris County will build and equip a boy's school to take place of one at South Houston, with money obtained from sale of old poor farm land.

Tex., San Marcos—School Board will vote on proposed \$200,000 bond issue on Dec. 20 for improvements of schools; program includes: Purchasing of Coronal Institute property for \$20,000, demolish buildings and use material for erection of 3 new schools; erection of Mexican School, 5-room brick building, and an 8-room building for negroes; fireproof building on Coronal site to cost about \$178,000; brick, steam heat; to contain 25

class rooms, library, study hall for 150 pupils, manual training, etc. (Lately noted.)

Tex., Thorp Spring—Thorp Spring Christian College plan enlargement of annual encampment grounds and summer school.

Va., Richmond—Richmond Academy of Science, Dr. J. Allison Hodges, Pres., plan erection of science building on West Franklin St.

W. Va., Coalwood—Board of Education of Big Creek District, J. Louis McCarty, Pres., McDowell County, proposes erection of high school to cost \$77,695.

W. Va., Huntington—Board of Education, Huntington Independent District, Jno. G. Graham, Supt., will take new bids for the erection of Douglass School building; 14 class rooms, domestic science and art rooms, gymnasium and auditorium; W. F. Diehl, Archt., Robson-Prichard Bldg., Huntington. (Lately noted to open bids Dec. 10.)

W. Va., Huntington—Marshall College and Huntington High School authorities have joined with business men of the city in an organization to secure funds for a municipal athletic stadium to seat 30,000 persons; city will donate site.

W. Va., War—Board of Education of Big Creek District, J. Louis McCarty, Pres., McDowell County, contemplates erection of high school building at War-Excelsior Consolidated school district; cost \$41,695.

Stores

Ark., Paragould—Hunt Wholesale Grocery Co., J. C. Hunt, Pres., plans rebuilding burned building at once; 2 stories with basement, concrete and tile. (Lately noted burned at loss of \$250,000.)

Fla., Fort Lauderdale—T. J. Piers, Holyoke, Mass., will erect store and apartment building on Dixie Highway.

Fla., Fort Lauderdale—W. A. Tolbert, of Panama City, has acquired site and plans erection of 2-story store and apartment building.

La., Houma—Houma Bargain Store, J. W. Bojorsky, Mgr., will select architect to prepare plans first of year for extensive remodeling and 3-story addition to Hyman Bldg. to cost about \$50,000.

La., Monroe—Palace Department Store will begin construction in few weeks of \$100,000 6-story building on Desirad St.; Drago & King, Archts., Monroe, La.

La., Shreveport—V. Cullate has plans by E. A. George, 1426 Abbie St., for erection of brick building composed of 3 stories and apartments above on Sprague St.; 2-story, 50x60 ft., face brick, composition roof, concrete floors, metal ceilings, steel sash, plaster.

S. C., Greenville—Jones Furniture Co., O. M. Benton, Mgr., plans connecting two stores by a covered bridge over the alley that separates them and will change fronts of both buildings and make extensive remodeling to interior.

Tenn., Knoxville—J. Park Vestal will erect 4 stores, each 20x110 ft. at 512-14 Asylum Ave.; cost \$40,000; structure will be 80x113 ft. with 2 stories and basement; brick, steel and concrete; metal ceiling on first floor; exterior will be faced with Ohio clay iron brick; plate glass with copper trim store fronts; Albert E. Gredig, Archt., Knoxville.

Tenn., Nashville—Thomas Cusack Co., W. H. Sory, Mgr., plans improvements to building at 605-7 McGavock St.; 70x100 ft.

Tex., Dallas—Sanger Bros., C. L. Sanger, Vice-pres., will add 130,000 sq. ft. of floor

space to department store at cost of \$250,000.

Tex., Houston—F. C. Moore will erect 2-story brick veneer building to contain 2 stores on first floor and 17 lodging rooms on second.

Tex., Lubbock—J. H. Bryan plans immediate construction of 2 brick stores.

Tex., Lubbock—Rix Furniture Co., recently purchased lot on 13th and J Sts., and contemplate building in spring.

Tex., Wichita Falls—J. J. Perkins and C. H. Cullum will erect \$15,000 1-story brick store building.

W. Va., Pennsboro—E. E. Wells and Bert Bradford plan erection of business building on lot adjoining Guy Flanagan Bldg.

Theatres

Tex., Lubbock—Robert Robb and Ed Rowley plan erection of \$100,000 theater.

Warehouses

Fla., Tampa — McGucken, McGucken and Edwards were lowest bidders at \$79,090, for

construction of municipal warehouse at the docks; W. L. Brown, City Mgr., has not awarded contract; 75x694 ft.; concrete and steel; A. W. D. Hall, Engr. in charge. (Late-ly noted.)

La., New Orleans—Letellier-Phillips Paper Co. has plans by Montz & Maroney, for rebuilding warehouse at 623 Front St., recently burned; cost about \$20,000.

Mo., Clinton—Clinton Transfer & Storage Co., Doane Farr, owner, is erecting brick, fireproof building.

S. C., Greenville—Shambow Shuttle Co. of Woonsocket, R. I. has purchased plant of Cyclone Motors, Inc., and will erect additional warehouse 36x120 ft.

Tex., Dallas—Dallas Park Board will erect brick warehouse at 3203 Junius St. to cost \$11,887.

Tex., Dallas—E. P. and Virgil Fisher will erect brick warehouse and office at 2400-2-4-6-8 S. Harwood St. to cost \$30,000.

Ark., Pine Bluff—Curtis Collins is erecting magnestone stucco residence, 17th and Mulberry Sts.; stucco and Johns-Manville roofing by Riley Feed Manufacturing Co., Pine Bluff; owner builds.

D. C., Washington—E. G. McGill, Cumberland, Md., and 2110 G St., N. W., Washington, has contract to move model home on Sherman Place to permanent site at 18th and New York Ave.

Fla., Bradentown—C. E. Rogers, New Rochelle, N. Y., let contract to Mason & Fonda, Bradentown, for erection of California bungalow type residence on Palma Sola Highway; hardwood floors.

Fla., Kelsey City—Mrs. Fannie P. Rust let contract for erection of English type residence in block 41, First St.; garage and servants' quarters.

Ga., Atlanta—Don Carlos DuBois let contract to G. R. Bond, Atlanta, for erection of residence on Cornell Rd. near Decatur Rd.; 2 stories, 8 rooms, 2 baths; steam heat; G. Lloyd & Co., Archts., Healey Bldg., Atlanta.

Ga., Macon—Dunwoody & Oliphant, Macon (lately noted Happ & Shelverton, Macon), prepared plans for \$59,200 residence under construction by Walter F. Thames, 38-39 Fourth Nat. Bank Bldg., Macon.

La., New Orleans—Lake Realty Co., let sub-contracts to the following for erection of triple residence on St. Charles and Henry Clay Aves., under supervision of Thos. H. Keen; J. J. Clark Co., building material; Watt Lumber Co., lumber; H. E. Chase, brick work; American Heating & Plumbing Co., plumbing; Roberts & Co., mill work; Horace White, tile roofing; Moise A. Goldstine, Archt., all New Orleans.

Md., Baltimore—Edw. H. Apsley, Inc., 2808 Overland Ave., will erect dwelling north side Southern Ave., east of Edna Ave. and 2 on north side Halcyon Rd., west of Harford Rd.; 1½ stories, about 26x32x16 ft., frame; total cost \$12,000; owner builds.

Md., Baltimore—J. A. Deeter, Shadowlawn Development, has started foundations for 15 semi-bungalows at Shadowlawn Dev.; 1½ stories, 26x32 ft., concrete and stone foundations, frame construction, slate roof, yellow pine and oak floors; G. Edw. Green, Archt., P. O. Box 83, Ham'lon, Baltimore; owner builds; Potts & Callahan, Baltimore, contract for street grading and steam shovel work. (Lately noted.)

Md., Baltimore—Owners' Realty Co., 2 E. Lexington St., will erect 17 two-story brick dwellings, N. E. cor. Ellicott Driveway and Littleton Rd.; 18x31x30 ft.; furnace heat; total cost \$42,000; Fredk. E. Beall, Archt., 306 St. Paul St., Baltimore; owner builds.

Md., Baltimore—J. Hurst Purnell, 4314 St. Paul St., will erect 6 two-story brick dwellings, 2036-46 N. Bentalou St.; 20x30 ft., slag roofs; total cost \$15,000; Geo. Wessel, Archt., 3001 Lyttleton Rd., Baltimore; owner builds.

Md., Baltimore—Mueller Construction Co., 22 Gunther Bldg., will erect eight 2½-story brick dwellings, 3400-17 Oakenshaw Place; slate roofs, hot water heat; total cost \$52,000; Flournoy & Flournoy, Archts., 306 St. Paul St., Baltimore; owner builds.

Mo., St. Louis—T. M. Dallmeyer, 4419 Clarence St., will erect 2-story brick tenement house, 4534 Clarence St.; cost \$10,000, 32x52 ft., composition and gravel roof, hot water heat; Anthony Hoffschwelle, Archt., 2023 Obear St.; Wm. Hoffschwelle, Contr., 5225 Conde St., both St. Louis.

Mo., St. Louis—Carl Doerfler, 4421 Nebraska St., will erect 2-story brick tenement house, 4543 Nebraska St.; 36 x 46 ft., composition roofs, furnace heat; total cost \$10,000; Mr. Hoffman, Archt., 2600 Wyoming St.; owner builds.

BUILDING CONTRACTS AWARDED

Bank and Office

Miss., Jackson—First National Bank let contract to Sumner-Sollitt Co., San Antonio, Tex., for erection of 2-story fireproof building, S. Congress and Capitol Sts.; cost about \$150,000; 50x120 ft., concrete, steel and terra cotta, built-up composition roof, tile, marble, cork-tile and maple floors, hollow and interior tile, plaster board, metal doors, vaults, vault lights, wire glass; direct steam heat, \$7000; electric lighting, \$4000; Marye, Alger & Alger, Archts., 801-05 Walton Bldg., Atlanta, Ga.; N. W. Overstreet, Asso. Archt., Jackson. (Lately noted.)

Mo., Kansas City—Clark Estate let contract to Reyburn Engineering & Construction Co., Kansas City, for erection of 12-story Medical Arts Bldg., 34th St. and Broadway, remodeling Tattershall apartment hotel as adjunct to main building and erection of garage to be connected by passage with main structure; G. B. Post & Sons, Archts., 318 Bryant Bldg., Kansas City; construction will probably begin within 2 months. (Previously noted.)

Okl., Pawhuska—First National Bank let contract to J. A. Camp, Pawhuska, for excavating 40x40-ft. basement for \$300,000 building, basement to be used for heating plant; Robt. E. Peden & Co., Archts., Kansas City, Mo. (Previously noted.)

Tex., Dallas—Lone Star Gas Co., R. A. Crawford, V.-P.-Gen.-Mgr., let contract to Hughes-O'Rourke Construction Co., Dallas, for erection of reinforced concrete, brick and terra cotta office building, Hardwood and Wood Sts.; 4 stories, with foundation constructed to carry 8 additional floors, 83x90 ft.; Lang & Witchell, Archts., Southwestern Life Bldg., Dallas. (Previously noted.)

Churches

Fla., Plant City—First Methodist Episcopal Church, E. T. Roux, Chmn., Bldg. Comm., has completed foundation of building under construction at Evers and Baker Sts.; Colonial type; rough faced brick, stone trim, warm air heating system, forced ventilation in kitchen; auditorium and balcony to seat 800; 3-story Sunday school section; Frank A. Winn, Archt., Tampa; Ricketts & Haworth, Contrs., Plant City. (Previously noted.)

Fla., Tampa—Schaari Zedek, Abe Mass, Chmn., Bldg. Comm., let contract to C. H. Cooper, Tampa, for erection of \$40,000 synagogue, DeLeon St. and Delaware Ave.; 1

story, 60x80 ft., hollow tile and stucco, hardwood floors, concrete foundation, ventilators, ornamental terra cotta; M. Leo Elliott, Archt.; N. W. Green, Engr., both Tampa. (Previously noted.)

Ky., Lexington—Albert Howard has contract to erect building for Centenary M. E. Church, N. Broadway and Church Sts.; 1 and 2 stories, 90x120 ft., brick construction, wood floors, tin roof, stone foundations.

La., New Orleans—Following have sub-contracts for work on Beth Israel Synagogue noted Nov. 29: Brick work, J. J. Swiller; stone, F. Fowers; electrical work, E. H. Hamann; plumbing, American Heating & Plumbing Co.; roofing, Johns-Manville Co.; hardware, Gibbons & Gordon; millwork, Wm. Geary & Son; lumber, Progressive Lumber Co.; tile, Southern Tile Co.; tile roofing, Horace White; paving, Peter Schaff; painting, Frank Probst; reinforcing steel and iron, Ole K. Olsen; plastering, Southern Plastering Co.; sheet metal work, Estate R. G. Holzer, all New Orleans.

Tex., Orange—Mt. Zion Baptist Church will start construction about Jan. 1 on \$30,500 building; brick and concrete damp proof walls, 2 stories and balcony, 50.9x85.9 ft., concrete and wood floors, concrete foundation, 4-ply tar, asphalt and gravel roof; heating, lighting and plumbing in general contract; Mr. Blound, Archt., Houston. (Lately noted.)

City and County

Ala., Montgomery—Auditorium—City let contract to Hugger Bros. Construction Co., 910H Bell Bldg., Montgomery, for repairing city auditorium.

Miss., Iuka—Courthouse — Tishomingo County, Miss Willie Leone Hiett, Clk., Board of Supervisors, let contract at \$11,000 to J. C. Jourdan, Iuka, for remodeling, enlarging and repairing courthouse. (Lately noted.)

Mo., Joplin—Concession Stand—City let contract to A. S. Greenwell, Joplin, for erection of concession stand and dining room at Schifferdecker Park; cost about \$10,000; plumbing to W. S. Kerwin, Joplin, at \$425. (Lately noted.)

Dwellings

Ala., Birmingham—Chas. F. DeBardelaben let contract to Smallman & Brice Construction Co., Birmingham, for erection of stone and veneer residence on Crest Rd.; cost \$59,000.

Mo., St. Louis—Thos. F. Pechan, 224 S. 12th St., will erect eleven 1-story, brick dwellings, 6407-11-15-19-23-27-31-35-39-43-47 Arsenal St.; total cost \$44,000; three 28x48 ft., eight 28x37 ft., asphalt shingle roofs, hot air furnaces; Oliver J. Popp, Archt., Odd Fellows Bldg.; W. B. Heard, Contr., 4625 Rosa St., both St. Louis.

Mo., St. Louis—S. C. Schoen, 6559 Marmaduke St., will erect four 1-story brick dwellings, 6508-14 Idaho St.; total cost \$16,800; 22x30 ft., slate shingle roofs, furnace heat; plans by owner; Scho-Wa Construction Co., Contr., 6541 Marmaduke St., St. Louis.

Mo., St. Louis—L. S. Thomas will erect \$10,000 brick tenement house, 6073 Cates St.; 2 stories, 38x50 ft., tar and gravel roof, hot air heat; R. B. Nash, Contr., 1744 N. Euclid St., St. Louis.

Mo., St. Louis—West End Realty & Construction Co., 6229 Delmar St., will erect two 2-story brick tenements, 2335-39 Ann St.; total cost \$20,000; 34x50 ft., composition roofs, steam heat; C. L. Thurston, Archt., 6229 Delmar St., St. Louis; owner builds.

N. C., Asheville—Judge W. E. Varmon has started erection of \$11,500 residence; 7 rooms, frame weatherboard construction, composition shingle roof, hot water heat; Chas. M. Parker, Archt., Asheville.

N. C., Balfour—Balfour Mills, Hendersonville, N. C., let contract to Fiske-Carter Construction Co., Greenville, S. C., for erection of 76 frame operatives' cottages; total cost \$150,000; sixteen, 6 rooms, sixty, 4 rooms; pine floors, brick foundations, shingle roof; lighting by owners; work not started.

N. C., Charlotte—Continental Manufacturing Co. will erect 4 bungalows on Victoria Ave.; 5 and 6 rooms; total cost \$20,000; A. V. Francis, Contr., Charlotte.

N. C., Charlotte—Mrs. Chas. B. King let contract to Warren Mobley, Charlotte, for erection of \$50,000 residence on Dilworth Rd.; 14 rooms, 2 stories, 79x59 ft., frame and brick veneer.

N. C., Raleigh—J. G. Prevette let contract in Nov. to Connell & Ratts, Raleigh, for erection of frame residence; 2 stories, 32 x 36 ft., pine and oak floors, composition roof, brick foundation; plans by contr.; vapor heating, knob and tube system of wiring and plumbing for 2 baths and 1 kitchen not let; excavation begun.

Tenn., Memphis—Mrs. A. M. Cannon let contract to Wilson & Wilson, Memphis (lately noted let to D. L. Crouch and Wilson & Wilson), for erection of \$10,323 duplex bungalow on Madison Ave.; 1 story, 36x40 ft., hardwood and pine floors, concrete foundation, composition shingle roof, interior tile.

Tex., Cleburne—Perry Harris let contract to Frank Crews, Cleburne, for erection of 2-story, 7-room residence.

Tex., Dallas—B. F. Farrar, Murphy-Bolan Co., let contract Nov. 1 to A. S. Childers, Dallas, at \$12,500 for erection of number of 1-story 5-room and bath, frame cottages in Ruthmede Addition; 3-in. pine floors; Emerson Bros., electric wiring; T. L. Benning, plumbing; both Dallas. (Lately noted.)

Tex., Dallas—J. A. Heiksel will erect 27 brick veneer cottages in Sunset Addition; total cost \$150,000; construction by J. A. Heiksel Construction Co.

Tex., Dallas—A. J. Rife let contract to John C. Robertson to erect \$30,000, 2-story brick and hollow tile residence in Highland Park; Thomson & Swaine, Archts., Dallas.

Tex., San Antonio—Geo. Habelstein has begun construction of English type residence, W. Woodlawn Ave. and Broadview Drive,

Woodlawn Hills; rough faced brick with stone trim, thatched roof, 10 rooms, 2 tile baths and basement; porch floors of terrazzo tile; heating and refrigerating systems; cost \$25,000 to \$30,000; Bert McNeil, Archt.; Irvin White, Asso. Archt., both San Antonio.

Va., Richmond—M. L. Hubbard plans to erect number of dwellings in Idlewood and on Chamberlyne Ave.; owner will build.

Va., Richmond—Davis Bros., Inc., 2510 W. Main St., will erect 14 dwellings on Maplewood Ave.; 2 stories, 22x34 ft., brick, concrete and oak floors, brick foundations, slag and slate roofs, hot water heat; plans and construction by owner. (Lately noted.)

Government and State

S. C., Greenville—Post Office and Courthouse—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., let contract to Perkins Construction Co., Greenville, at \$42,485, for construction of new mailing vestibule with fuel room beneath, about 37x19 ft. in plan, with brick exterior wall with non-fireproof interior and roof construction, a new parcels post room in basement and lift enclosure, at post office and courthouse. (Lately noted.)

Hospitals, Sanitariums, Etc.

Md., Baltimore—Sisters of Bon Secour let contract to Frainie Bros. & Haigley, 19 W. Franklin St., Baltimore, for erection of west wing of hospital at Fayette and Pulaski Sts.; cost about \$20,000; Jos. Evans Sperry, Archt., Calvert Bldg., Baltimore.

N. C., Asheville—Hill Crest Sanitarium, Fairview Rd., has started construction of 2-story and basement addition; frame and shingle walls, composition shingle roof; Chas. M. Parker, Archt.; Sluder Bros., steam heating, both Asheville.

Okl., Tulsa—Tulsa County let contract to Brckner-Garbett Construction Co., Tulsa, at \$13,207 for erection of tubercular hospital and refrigerating plant at County Farm; United Iron Works, Tulsa, to furnish refrigerating equipment at \$8518.

Tex., Austin—State Board of Control, S. B. Cowell, Chmn., Austin, let contract to Albert Mundt, Austin, at \$15,639 for erection of addition to hospital at Confederate Women's Home; reinforced concrete, brick and stucco, 35x60 ft., 3 stories, cement and wood floors, composition built-up roof, concrete footings; electric wiring to J. O. Andrewartha Co.; plumbing to John Wattinger; C. H. Page & Bro., Archts., all Austin. (Lately noted.)

Tex., Ennis—City, Hix McCannless, City Engr., let contract to Lawson & Co., Ennis, for erection of hospital.

Tex., San Antonio—State Board of Control, S. B. Cowell, Chmn., Austin, let general contract at \$59,760 to A. E. Rhelner & Co., San Antonio, for erection of 2 tubercular cottages at Southwestern Insane Asylum; plumbing to A. H. Shafer at \$4928; electric wiring, Thomson Electric Co., \$1483; heating, Chalkley Bros., \$6762; Phelps & DeWees, Archts., Gunter Bldg., all San Antonio. (Previously noted.)

Tex., Shiner—Newman Brothers, Kenedy, Tex., have contract for erection of 2-story, 16-room, brick hospital.

Hotels and Apartments

Ala., Opp—Mrs. W. W. Rye let contract to J. W. Scroggins to erect \$10,000 brick building to replace Smith Hotel recently burned; 2-story, 20 rooms.

Fla., Jacksonville—L. N. Wilkie let contract to Basil P. Kennard to erect 2-story

brick apartment house, west side Riverside to cost \$65,000.

Fla., Lakeland—Central States Hotel Co., awarded contract to Adair & Senter, Atlanta, to erect \$600,000 hotel; 9 stories, 60x122 ft.; tar, gravel and tin roof; concrete foundation; cement terrazzo and tile flooring; hollow tile, interior tile, metal ceilings, metal doors, ventilators, steel sash and trim; Hentz, Reed and Adler, Archts., Candler Bldg., Atlanta. (Lately noted.)

Ga., Atlanta—Garrison Corp. awarded contract to Foundation Co., of New York City, with offices at Atlanta, to erect 9-story apartment house at Peachtree and Sixteenth Sts., cost \$400,000; 36 apartments of 5 or 6 rooms with 2 baths each; Hentz, Reed and Adler, Archts., Atlanta.

Ky., Louisville—Citizens Hotel Co., W. K. Stewart, Chmn. Executive Comm., has not yet awarded sub-contracts on heating and power plant, electric lights, plumbing, elevator, etc., for erection of \$3,000,000 hotel for which Rummel Bros., 919 E. Broadway, Louisville, has the general contract. (Noted Nov. 29.)

Mo., Clayton (Ind. Br. St. Louis)—A. L. Ahnefeld, 4360 Warne St., will erect 6-family apartment on S. Rosebury; cost \$20,000; 40x65 ft.; D. R. Harrison, Archt. Owner builds.

Mo., St. Louis—Max Goldman, 808 Chestnut St., let contract to Jacob Rubin, 808 Chestnut St., to erect 3-story brick apartment at 4227 Lindell St., to cost \$40,000; 38x124 ft.; tar and gravel roof, furnace heat; Oliver Popp, Archt., Odd Fellows Bldg., St. Louis.

N. C., Raleigh—R. W. Bailey let contract in Nov. to Connell & Ratts, Raleigh, for erection of \$34,500 apartment house; brick veneer, 72.6x35.3 ft., concrete, pine and oak floors, cement foundations, 4 stories, composition roof; plans by contr.; contracts not let for vapor heating system, knob and tube lighting system and plumbing for 10 baths and 9 kitchens. (Lately noted.)

Tenn., Chattanooga—John Thompson Estate, Mrs. W. F. Reed and Mrs. L. S. Whitaker, awarded contract to Stewart Construction Co. to erect 4-story apartment on McCallie Ave. to cost \$75,000; 24 apartments; elevator.

Tenn., Memphis—B. G. Polk awarded contract to F. J. Ozanne & Co., to erect 3 store and apartment building at 628 Madison Ave. to cost \$50,000; 25 rooms each with private bath, dark brick front; Fischer Heating Co., heating; Pritchard Bros., plumbing; E. L. Harrison, Archt., Memphis.

Tex., Dallas—W. P. Morgan awarded contract to Southern Construction Co., Dallas, to erect 1-story store to contain 4 store-rooms and a 2-story frame apartment building at Bryan and Fitzhugh Sts.; total cost \$27,000. Young & Young, Archts., Dallas.

Schools

Ala., Athens—Athens College, Methodist School for Girls, Dr. G. G. Glasgow, Pres., awarded contract to Walker Construction Co., Fayette, to erect \$70,000 dormitory.

Ala., Eufaula—City, D. C. Doughtie, Clk., let contract to R. H. Ludlum, Bainbridge, Ga., to erect \$69,000 school building; 2 stories, 8 rooms and auditorium, brick, composition roof, wood and concrete floors, electric lights, steam heat contract not let; Frank Lockwood, Archt., Montgomery, Ala. (Lately noted.)

Fla., Longwood—Board of Instruction, Sanford, Seminole Co., Fla., T. W. Lawton, Supt., awarded contract to J. B. Southard, Orlando, to erect \$23,000 school building; 6 rooms and auditorium, brick and concrete, composition roof; Gillon Electric Co., electric lighting; Mahoney-Walker Co., plumbing; both Sanford, Fla. (Lately noted.)

Ga., Augusta—Richmond County Board of Education, Lawton B. Evans, Secy., awarded contract to Palmer-Spivey Construction Co., Augusta, to erect \$85,000 school building; 2 stories and basement; 129x109x60 ft.; brick, reinforced concrete and frame; tin roof; hardwood, concrete and maple flooring; Webster Modulation heating plant; hollow tile, metal ceilings, plaster board, interior tile, metal doors, ventilators, ornamental terra cotta, wire glass, knob and tube wiring; Scroggs and Ewing, Archts., Lamar Bldg., Augusta. (Lately noted.)

Ga., Hephzibah—Richmond County Board of Education, Lawton B. Evans, Sec., Augusta, awarded contract to Schweers & Anderson, Augusta, to erect consolidated school building to contain 12 class rooms and auditorium to seat 600; hollow tile, wood floors, tin roof, Warren-Webster vapor heat at \$5000; Willis Irvin, Archt., Lamar Bldg., Augusta. (Lately noted.)

Ky., Madisonville—School Board awarded contract to Arville Harrill to erect school building at Rocky Springs.

La., New Roads—Pointe Coupee Parish School Board, A. McFarland, Sec., awarded contract to Burkes & Halley, Baton Rouge, at \$76,800, to erect 3-story brick school building; 123x98 ft.; 21 rooms, teachers' and cloak rooms, auditorium, etc.; brick walls, pressed brick face, stone trimming, Barrett roof; Wm. R. Burk, Balter Bldg., New Orleans. (Lately noted.)

Mo., St. Louis—Most Rev. J. J. Glennon, Archbishop of St. Louis, awarded contract to Duffner & Stecker Construction Co., DeMenil Bldg., St. Louis, at \$250,000, to erect Catholic Boys' High School at 1909 Kings-highway Memorial Blvd.; 2 stories and ground floor; 210.3½x101.6 ft.; concrete, fireproof, composition roof, maple and concrete floors, hollow tile, metal ceilings, interior tile, metal doors, vault lights, ventilators; electric lighting, heating and plumbing, not awarded, Edw. J. Hughes, 3919 Olive St., St. Louis, plumbing; Henry P. Hess, Archt., 4811 Cote Brillante Ave., St. Louis. (Lately noted.)

Tenn., Lebanon—Board of Education of Wilson County, awarded contract to P. J. Dunnavant & Co., 606 Broadway, Nashville, Tenn., to erect \$112,993 school building; 2 stories and basement; fireproof; brick and reinforced concrete; maple over concrete floors; low pressure steam heat; C. K. Colley & Co., Archts., 310 Mowbray First National Bank Bldg. (Lately noted.)

Tex., Corsicana—State of Texas awarded contract to J. E. Johnson Construction Co., Waco, at \$80,944, to erect dormitory; 52x125 ft.; concrete frame, fireproof, exterior face brick; composition roof, concrete and e. g. pine floors, concrete foundation, hollow tile, ventilators; Hill Bros. & Co., Waco low pressure system with underground main connected to central power house at \$6539; Superior Electric Co., Dallas, electric fixtures with one ventilating fan and out house; J. H. Wooley, Corsicana, plumbing; H. O. Blanding, Archt., Corsicana.

Tex., Galveston—Board of Education, Chas. Fowler, Pres., awarded contract for erection of schools to following: for general work, Walsh & Burney, San Antonio, additions and improvements to Ball High School, Sam Houston and Davy Crockett at \$363,146; Standard Construction Co., Houston, erection of Goliad School at \$182,350; plumbing, A. H. Shafer, San Antonio, all 4 buildings at \$38,390; heating and ventilating, Kinnison Bros., Dallas, all 4 buildings at \$56,500; electrical work, Kirkwood & Wharton, San Antonio, all 4 buildings at \$15,595.75; Wm. B. Ittner, Archt., St. Louis, Mo. and DeWitt & Lemon, Asso. Archt., Dallas, Tex. (Lately noted.)

Tex., Junction—Board of Education will erect \$60,000 high school; 2 stories, stone and stucco, metal ceilings, metal lath, steel sash; contracts for wiring, plumbing and heating will soon be let; J. C. Ray, Archt., Dallas; day labor.

Va., Newsoms—Southampton County School Board awarded contract to E. C. Smith, Franklin, Va., to erect school building to contain 12 class rooms and auditorium to seat 450; cost \$35,000; brick walls, wood floors, composition, tar and gravel roof, electric lighting included in general contract, plumbing to be let later; Pickard Co., Norfolk, steam heat and ventilating at \$4975; W. Newton Diehl, New Monroe Bldg., Norfolk, Va. (Lately noted.)

W. Va., Charleston—Board of Education, Charleston Independent School Dist., awarded contract to Barger & Swartz, Charleston, at \$37,638, to erect school buildings on Truslow and Upper Bigley Sts.; first unit containing 6 rooms in each school in present contract; plumbing, heating and wiring contracts will be let later; Warne, Tucker and Patterson, Archts. (Lately noted.)

W. Va., Fairmont—Board of Education of Fairmont Independent District, let contract to Dow Co., Louisville, Ky., to install additional fire escapes at various school buildings.

W. Va., Huntington—Board of Education, Huntington Independent School District, Jno. G. Graham, Supt., awarded sub-contracts for schools as follows: Columbus Heating & Ventilating Co., heating; Holtzworth Plumbing Co., Huntington, plumbing; General contracts recently noted let.

Stores

La., New Orleans—J. V. and R. T. Burkes, 1401-3 Carondelet Bldg., general contractors for erection of \$500,000 annex to Maison Blanche Bldg. let sub-contracts to following bidders: iron and steel, Southern Builders Material Co.; pile driving, Doullut & Williams; sheet metal work, American Sheet Metal Works; demolishing, Southern Demolishing Co.; plumbing, American Heating & Plumbing Co.; building material, Jahncke Service, Inc.; roofing, A. H. White Roofing Co.; steel rolling doors, Southern Building Material Co.; water proofing, D. S. Melville; steel sash and glazing, Carolina Portland Cement Co.; face brick, Acme Brick Co.; hardware, Gibbons & Gordon; cement floors, R. E. Reynolds; concrete form lumber, Louisiana Southern Lumber Co.; reinforcing steel, C. & P. Turner, J. T. Mann, agents. Emile Weil, Archts., Whitney Central Bldg., New Orleans. (Previously noted.)

Mo., St. Louis—Cleary Investment Co., 508 Merchants Exchange, will erect 3-story store building at 418-22 N. 7th. and 620 St. Charles, to cost \$50,000; 57x75 ft., composition roof, steam heat; Nat Abrahams, 517 Chemical Bldg., builder and architect.

Mo., St. Louis—R. Mederacke, 4430 Arsenal St., will erect 2-story store and tenement at 4065-67 Shaw and 1826 Thurman St.; cost \$20,000; 65x50 ft., tar and gravel roof, steam heat; owner is architect and builder.

Mo., St. Louis—Bertha Suchart, 407-22 Chestnut St. let contract to R. P. Rielley, 407-22 Chestnut St., to alter and make additions to 1-story stores at 1730-40 Lafayette St. and 1704 S. 18th St.; cost \$10,000; 20x58 ft.; tar and gravel roofs; H. W. Guth, Archt., 2647 Oregon St., St. Louis.

N. C., Lexington—City Drug Co., Hege-Harmon Bldg., O. D. McBane, of Burlington, Secy. and Treas., awarded contracts to Georgia Show Case Co., Montgomery, Ala., for fixtures; Robert M. Green & Sons, Philadelphia, soda fountain.

S. C., Greenville—W. T. Grant Co., 28 West Twenty-third St., New York City, have leased building from Mrs. Mamie P. Browning, and awarded contract to Morris-McKoy Building Co. at \$30,000 for remodeling; 80x120 ft.; 2 stories, concrete, maple and hardwood floors; Barrett tar and gravel roof, metal ceilings, metal doors, rolling partitions; bids desired on tile and terrazzo and mill work; contracts for heating and power, electric lights and plumbing not let; 1 hand power electric elevator. A. F. Evans, Archt., 28 West Twenty-third St., New York City. (Lately noted.)

Tex., Big Springs—J. M. Morgan awarded contract to erect \$20,000 brick business building.

Tex., Dallas—Mrs. E. H. Crowds awarded contract to A. J. Rife, to erect \$15,000 store building at Ervay and Royal Sts.; brick; Thomson & Swaine, Archts., Dallas.

Warehouses

Ky., Henderson—Belt Line Warehouse Co., Jno. H. Hodge, awarded contract to T. H. Overby, Henderson, to erect a brick and iron clad warehouse; 109x171 ft.; elevator; all contracts let and construction started; J. Alves Clore, Archt., Henderson.

Mo., St. Louis—St. Louis Brew Assn., 1720 Cass St., let contract to D. Seeger, 306 Frisco Bldg., to erect 2-story warehouse at 2018 Chouteau; cost \$15,000; 65x45 ft.; M. F. Fleischer, Archt., 306 Frisco Bldg.

N. C., Asheville—Fred Kent let contract to J. E. Joiner, Asheville, to erect 5-story brick and concrete warehouse; cost about \$175,000; 140x140 ft.; foundation being laid; will be occupied by Farmers Federation and Ebbs Bros., wholesale grocers.

S. C., Greenville—McGee-Anderson Co. awarded contract to Potter & Shackelford, Inc., Greenville, to erect 2-story, brick and timber warehouse on Cox St.; cost about \$11,000; 38x160 ft.; tar and gravel roof; wood floors; all material purchased; S. F. Floyd Plumbing Co., plumbing; elevator installed by general contractor. (Lately noted.)

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Asphalt Doors and Frames.—See Building Materials.

Automobile Accessories.—C. B. Lewis, Mgr., The Duty Air Brake Co., Harrisville, W. Va.—Prices on outer brakes for Ford cars; also brake linings.

Automobile Body.—C. Fred Hunt, 209 N. Maple St., Somerset, Ky.—To purchase second-hand limousine or sedan automobile body.

Bale Tie Machines.—E. P. Churchwell & Son, Savannah, Tenn.—To purchase bale tie machine for the manufacture of bale ties.

Boat Hulls.—U. S. Engineer Office, Vicksburg, Miss.—Bids until Jan. 10 to furnish and deliver two steel maneuver boat hulls.

Boiler.—W. F. Collar, Const. Engr., Austell, Ga.—Prices on 150 h. p. boiler for furniture plant.

Boiler.—Hackley Morrison Co., Inc. (Mchy. Dealers) 1708 Lewis St., Richmond, Va.—To purchase 250 to 300 h.p. Scotch dry back boiler A. S. M. E. code, Ohio standard.

Boiler.—E. C. Robinson, Jr., Treas., Muriel Lumber Co., Clinton, S. C.—Prices f.o.b. on one 100 h.p. boiler; second-hand.

Bridge.—Coke County, Robert Lee, Tex. Details under Construction News—Bridges, Culverts, Viaducts.

Bridges.—Louisiana Highway Comm., Baton Rouge, La., will build 3 bridges. Details under Construction News—Bridges, Culverts, Viaducts.

Bridge.—Palm Beach County, West Palm Beach, Fla. Details under Construction News—Bridges, Culverts, Viaducts.

Bridge.—Palm Beach County Commrs., West Palm Beach, Fla. Details under Construction News—Bridges, Culverts, Viaducts.

Bridge.—City of Winston-Salem, N. C. Details under Construction News—Bridges, Culverts, Viaducts.

Bridge.—Hinds County, Jackson, Miss. Details under Construction News—Bridges, Culverts, Viaducts.

Building Materials.—Atlas Iron Works, Geraldine and Slevin Aves., St. Louis, Mo.—To purchase cast iron cleanout doors and frames, asphalt doors and frames, coil rings and covers, roof vents and foundation vents and miscellaneous iron work for buildings.

Cars (Passenger and Logging).—P. O. Box 820, Cincinnati, Ohio.—To purchase one railroad gasoline propelled passenger car and 25 logging cars.

Carts (Dump).—Duplin Construction Co., Warsaw, N. C.—12 contractors dump carts complete with pack saddles.

Castings.—See Water Works Improvements.

Concrete Culverts.—Barber-Fortin Co., 42 Barnett Bldg., Jacksonville, Fla.—Sub-bids on concrete culverts for 11 1-3 mi. road.

Concrete Paving Equipment.—J. P. Foty, Vernon, Tex. Concrete paving equipment for 3.61 mi. paving.

Cotton Baler.—Wilson-Hock Co. (Mchy. Dealers), City Point, Va.—Dealers prices on good, second-hand cotton baler.

Engine.—E. C. Robinson, Jr., Treas., Muriel Lumber Co., Clinton, S. C.—Prices f.o.b. on 80 h.p. engine; second-hand.

Engine.—W. F. Collar, Const. Engr., Austell, Ga.—Prices on 18x36 Corliss engine for furniture plant.

Engine (Oil).—Lambe & Denmark Light & Water Co., Arkansas City, Ark.—To purchase 75 h.p. oil engine, second-hand.

Engine and Generator.—U. S. Engineer Office, Huntington, W. Va.—Bids opened

Dec. 19 to furnish and deliver Diesel engine with electric generator, propulsion motor and control equipment for same for tow-boat Kanawha.

Filters.—See Water Works Improvements.

Fire Alarm Equipment.—Sec. of the Commission Council, City Hall, Baton Rouge, La.—Bids until Dec. 27 to furnish and deliver fire alarm apparatus f. o. b. Baton Rouge and install central fire alarm office equipment for city of Baton Rouge.

Fire Hydrants.—See Water Works Improvements.

Folding Door Controls.—Weatherproof Body Corp., Corunna, Mich.—To purchase folding door controls for front entrance of pay-enter busses.

Garage Equipment.—Floresville Motor Co., Floresville, Tex.—Machinery and equipment for rebuilding and repairing automobiles.

Gates (Lock).—U. S. Engr. Office, Box 72, Louisville, Ky. Bids until Jan. 3 to furnish, deliver and erect gates for Lock No. 45 Ohio River.

Gate Valves.—See Water Works Improvements.

Generator.—Van Veneer Co., Malvern, Ark. Prices on 150 K. W., A. C. generator.

Generator (Oil Engine) Station.—See Water Filtration Plant, etc.

Generator.—Hosshall Machinery Co., Box 187, Memphis, Tenn.—To purchase 187 KVA (150 KW) 3 phase, 60 cycle, 240 volt generator connected to automatic engine; state full details.

Grading.—Barber-Fortin Co., 42 Barnett Bldg., Jacksonville, Fla.—Sub-bids on grading for 11 1-3 mi. road.

Grinder.—See Lathe Clipper and Grinder.

Iron Hoods for Brick Mantles.—Mrs. E. S. Ford, Louisburg, N. C.—To purchase iron hoods for brick mantles, to go over the grate.

Ladder Rungs.—John J. Macklem Scaffolding Co., Stimson Bldg., Los Angeles, Cal.—To correspond with manufacturers of or dealers in hickory ladder rungs.

Lathe Clipper and Grinder.—Van Veneer Co., Malvern, Ark.—Prices on veneer lathe clipper and grinder.

Laundry Equipment.—Hackley Morrison Co., Inc. (Mchy. Dealers), 1708 Lewis St., Richmond, Va.—To purchase 18 to 20-in. extractor for laundry.

Laundry Equipment.—Thos H. Haughton, Jr., 14½ S. Church St., Charlotte, N. C.—To correspond with manufacturers of laundry equipment.

Laundry Equipment.—Wilson-Hock Co. (Mchy. Dealers), City Point, Va.—Dealers prices on 36-in. solid curb extractor, suitable for a laundry.

Locomotive.—P. O. Box 820, Cincinnati, Ohio.—To purchase 80-ton locomotive.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Dec. 28 to furnish: High tension ignition cable; resistance and magnet wire; electrical fixtures; copper connectors; battery jars; varnish canbric taper; storage batteries; tires and tubes; carburetors; micrometers; automobile pumps; soap dispensers; lantern globes; barrel bolts; hinges; lumber, etc. Blank forms and information (Circular 2341) on application to office of Panama Canal; Asst. Purchasing Agents at Fort Mason, San Francisco, Cal.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Jan. 2 to furnish:

Rope (steel, phosphor bronze and manila); zinc; lead; boronic copper alloy; tractor mowers; electric motor; galvanometers; waffle baker; scales; marine glasses; water-closet tanks and bowls; valves; nails; track bolts; splice bars; pitch; asphalt roofing and cement; benzine; oils; paints and varnishes; wax stencil paper; paper napkins and cups, etc. Blank forms and information (Circular 1580) on application to offices of Panama Canal; Asst. Purchasing Agents at 24 State St., New York; 611 Gravier St., New Orleans, La., and Fort Mason, San Francisco, Cal.; also United States Engr. offices throughout the country.

Miscellaneous Supplies.—J. Dass & Brothers, Armistat, India.—To correspond with manufacturers of the following with view to representation: Hardware; caustic soda; cements; iron and steel; sundry goods of all kinds, etc.

Mixers (Concrete).—Acme Sand Co., Eustis, Fla.—To purchase one Kent concrete mixer, No. 2½ or larger; one Dunn mixer, No. 9 or larger with hoist and two way spout; used equipment.

Motor.—Hackley Morrison Co., Inc. (Mchy. Dealers), 1708 Lewis St., Richmond, Va.—Prices on one 50 h. p., 3 phase, 60-cycle, 220-volt squirrel cage motor with base, pulley and starter, slightly used equipment.

Motors.—Van Veneer Co., Malvern, Ark.—Prices on motors.

Motors.—W. F. Collar, Const. Engr., Austell, Ga.—Prices on motors for furniture plant.

Oil Burning Device.—W. L. Duncan, 347 Arcade Bldg., Norfolk, Va.—To correspond with manufacturers of oil burning device for installation in heating plants of residences, apartments, etc.

Paving.—City of Albany, Ga. Details under Construction News—Road and Street Construction.

Paving.—State Highway Dept., Montgomery, Ala. Details under Construction News—Road and Street Construction.

Pig Lead.—Board of Awards, C. F. Dolfeld, City Register, Baltimore, Md.—Receives bids until Dec. 26 to furnish and deliver 400,000 lbs. of pig lead to water department; V. Bernard Siems, Water Engr.

Pipe (Iron).—See Water Works Improvements.

Printing Machinery.—American Publishing Co. of Memphis, P. O. Box 451, Memphis, Tenn.—Invites bids on printing machinery.

Rails.—E. C. Robinson, Jr., Treas., Muriel Lumber Co., Clinton, S. C.—Prices f.o.b. on 3 to 4 tons of 14 to 20 lb. rails; second-hand.

Road.—Hinds County, Jackson, Miss., will build 3 roads. Details under Construction News—Road and Street Construction.

Road.—Milam County, Milam, Tex.—Details under Construction News—Road and Street Construction.

Road.—Palm Beach County, West Palm Beach, Fla. Details under Construction News—Road and Street Construction.

Road.—Potter County, Amarillo, Tex. Details under Construction News—Road and Street Construction.

Road.—Denton County, Denton, Tex. Details under Construction News—Road and Street Construction.

Road.—Coke County, Robert Lee, Tex. Details under Construction News—Road and Street Construction.

Road.—Robertson County, Franklin, Tex. Details under Construction News—Road and Street Construction.

Road.—Warren County, Vicksburg, Miss. Details under Construction News—Road and Street Construction.

Road.—State Highway Comm., Montgomery, Ala.—Details under Construction News—Road and Street Construction.

Road.—Val Verde County, Del Rio, Tex. Details under Construction News—Road and Street Construction.

Road Rollers.—J. P. Foty, Vernon, Tex.—Rollers for 3.61 mi. concrete paving.

Sewer.—City of Baltimore, Md. Details under Construction News—Sewer Construction.

Sewer Extensions.—See Water Works Improvements.

Sidewalks.—City of Jefferson City, Mo. Details under Construction News—Road and Street Construction.

Tanks (Sheet Iron).—C. B. Lewis, Mgr., The Duty Air Brake Co., Harrisville, W. Va.—Prices on sheet iron tanks 6x18-in. tapped for ½-in. connection in both ends.

Tank.—See Water Works Improvements.

Vents (Roof and Foundation).—See Building Materials.

Water.—City of Baltimore, Md. Details under Construction News—Water Works.

Water Filtration Plant, etc.—Town of North Wilkesboro, N. C.—Will open bids about Jan. 15, 1924 for water filtration plant and oil engine generator station complete with all necessary appurtenances; Carolina Engineering Co., Engr., 412 Southern Bldg., Wilmington, N. C.

Water Works.—City of Elizabethtown, Ky. Details under Construction News—Water Works.

Water Works.—Dist. of Columbia. Details under Construction News—Water Works.

Water Works Improvements.—City of Ashboro, N. C., Arthur Ross, Mayor, opens bids Jan. 10 for water works improvements and sanitary sewer extensions, work embraces the following approximate quantities: 500,000 gal. filter and repairs to old filter; 30,000 gal. steel tank on 40-ft. tower of steel; 250,000 gal. concrete reservoir; 250 g.p.m. and 750 g.p.m. centrifugal pump; 200 ft. of 12-in., 1800 ft. of 10-in., 1600 ft. of 8-in., 26,082 ft. of 6-in. cast iron pipe; 13 tons special castings; three 12-in., two 10-in., five 8-in., thirty-six 6-in. gate valves; 45 valve boxes; 42 fire hydrants; 28,765 ft. of 8-in. sewers with appurtenances; 3300 ft. of 10-in. sewers with appurtenances; two septic tanks; J. B. McCrary Engineering Corp., Engrs., Atlanta, Ga.

Woodworking Machines.—Hickory Handle Co., Batesburg, S. C.—To correspond with manufacturers of machines for making spools, etc.

Woodworking Machinery.—T. B. Upchurch, Radford, N. C.—Light woodworking machinery.

Woodworking Machinery.—W. F. Collar, Const. Engr., Austell, Ga.—Prices on machinery for furniture plant.

J. S. Moose, Sec., Clifton Moose, Treas., J. S. Moose, Cash.

Ark., Smackover.—South Arkansas Fire Insurance Co., organized with B. G. Barnes, Pres.; John Watson, V.-P.; C. D. Bibbs, Sec.

Fla., Daytona.—Peoples Building & Loan Co., capital \$500,000, incorporated with J. L. Wetherby, Pres.; Max Leidersdorf, Sec.

Fla., Daytona.—Peoples Building & Loan Co., capital \$500,000, organized with L. Wetherby, Pres.; Jas. Luther, V.-P.; Max Leidersdorf, Sec.; C. E. Luther, Treas.

Fla., Sarasota.—Ringling Trust & Savings Co., capital \$50,000, incorporated with Chas. Ringling, Pres.; Louis Lancaster, Sec. and Cashier.

Ga., Columbus.—Realty Loan & Title Guaranty Co., capital \$50,000, incorporated by J. Maddern Hatcher, Josiah Flournoy and others.

Md., Baltimore.—Union Small Loan Assn., capital \$100,000, incorporated by David S. Hawkins, Pres., J. R. Noble, Sec., E. C. Reamer, Treas.

Md., Baltimore.—Uniform Small Loan Assn., 320 Park Ave., capital \$10,000, incorporated by David S. Hawkins, Edwin C. Reamer and others.

Md., Baltimore.—Grodno Building & Loan Assn. of Baltimore City, 1824 N. Mount St., capital \$200,000, incorporated by Louis E. Macht, Solomon Glass and others.

Md., Baltimore.—Hancory Building & Loan Assn., Inc., Harford Rd. and Southern Ave., capital \$650,000, incorporated by Henry Schmidt, Walter K. Harrison and others.

Md., Baltimore.—Bernard Building & Loan Assn., 3510 Springdale Ave., capital \$200,000, incorporated by Chas. A. Cahn, Daniel Fisher and others.

Md., Baltimore.—Mortgage Building & Loan Assn., 1337 West North Ave., capital \$1,000,000, incorporated by Sol Silverman, Mose I. Spwert and others.

Md., Cumberland.—Allegany County Mortgage & Securities Corp., capital \$100,000, chartered by Jacob Gross, Morris Baron and others.

Md., Edgemoor.—Edgemoor Investment Co., incorporated by Chas. S. Robb, Wm. H. Boyd and others.

Mo., Kansas City.—Continental National Bank & Trust Co., consolidated with Commerce Trust Co., through purchase; J. G. Hughes, V.-P.; M. Bingham, Asst. Cashier.

Okla., Tulsa.—Bixby State Bank, plans reorganizing; D. D. Wamsley, former Pres.; W. J. Cross, former Cashier.

Tenn., Johnson City.—Washington County National Bank of Johnson City, chartered with \$100,000 capital; being conversion of City Savings & Trust Co., Johnson City.

Tenn., Johnson City.—City Savings & Trust Co., reorganized under name of Washington County Natl. Bank, capital \$100,000, incorporated by W. H. Carter, Pres., W. W. Miller, V.-P., F. L. Wallace, Cash.

Tenn., Oneida.—Oneida Bank & Trust Co., organized with C. Cross, Pres.; Geo. W. Cross, Cashier.

Tex., Dallas.—Central Title & Guaranty Co., capital \$150,000; chartered with J. K. Hexter, Pres.; acquired City Abstract Co., Inc.

Tex., Dallas.—Central Title Guaranty Co., capital \$140,000, incorporated by J. K. Hexter, T. A. Manning and others.

Tex., Fort Worth.—W. M. Massie, V.-P., Fort Worth National Bank, reported interested in forming \$1,000,000 trust company.

Tex., Galveston.—Texas Bank & Trust Co., converted into United States National Bank of Galveston; R. Lee Kempner, V.-P. and cashier.

Tex., Garlin.—Garlin Building & Loan

Assn., capital \$250,000, incorporated by Geo. A. Alexander, Ford Scale and others.

Va., Clarendon.—General Service Corp., capital \$25,000, incorporated with Percy W. Finney, Pres., Clarendon; E. W. Hopkins, Sec., Washington, D. C.

Va., Rustburg.—Campbell County Bank, capital \$50,000, incorporated with Robert A. Russell, Pres.; M. L. Merriman, Sec.

W. Va., Athens.—Plymouth Insurance & Realty Agency, capital \$10,000, incorporated by T. R. Hughes, C. W. Martin and others.

W. Va., Elkins.—Citizens National Bank of Elkins, capital \$100,000, organized with H. G. Kump, Pres.; E. W. Channell, V.-P.; Howard L. Collett, Cashier. (Lately noted.)

W. Va., Huntington.—Citizens National Bank, capital \$100,000, organized by H. G. Glump and others.

New Securities

Ala., Bessemer.—School—City Clk., C. M. Scott sold \$150,000 bonds to City Natl. Bank. (Lately noted.)

Ala., Cordova.—School—Town, J. W. Key, Clk., will receive bids until Jan. 1 for \$30,000, 5½%, \$500 denom. bonds.

Ala., Eufaula.—School—City sold \$100,000 bonds to Caldwell & Co., of Birmingham, Ala.

Ala., Eufaula.—School—City, T. C. Dough-tie, Clk., sold \$90,000, 5½% bonds to Caldwell & Co., Nashville, Tenn., and Birmingham, Ala., at \$97. (Lately noted.)

Ala., Fairfield.—Street Improvement—City, M. W. Pratt, Mayor, will receive bids until Dec. 20 for \$5500 bonds.

Ala., Gadsden.—Public Improvement—City sold \$19,000 bonds to Ward, Sterne & Co., Birmingham, at par and accrued interest.

Ark., Pine Bluff.—School—H. B. Strange, Sec. Board of Directors, School Dist., receives bids until Dec. 19 for \$250,000 to \$290,000 5% bonds.

Ark., Little Rock.—School—Mercantile Trust Co., Lorenzo E. Anderson & Co., and Potter, Kauffman & Co., all of St. Louis, Mo., jointly purchased \$220,000, 5¼% \$1000 denom. Special School Dist. bonds.

Fla., Arcadia.—Refunding—De Soto county will vote Feb. 2 on \$280,000 bonds.

Fla., Bartow.—Road—Polk County will vote Feb. 26 on \$4,000,000 bonds. Address County Commrs.

Fla., Bartow.—Highway—Polk County will vote Feb. 26 on \$3,600,000 5½% bonds. Address County Commrs., W. S. Wer, Sec.

Fla., Eau Gallie.—Improvement—Walter, Woody & Heimerdinger, Cincinnati, Ohio, purchased \$39,000 bonds.

Fla., Fort Lauderdale.—Municipal Improvements—City voted \$100,000 bonds for following improvements: Water extension, \$45,000; street improvement, \$40,000; seawall and dock improvements, \$12,000; lot clearing, \$3000. Address The Mayor. (Lately noted.)

Fla., Fort Pierce.—School—St. Lucie County, Board of Public Instruction, E. E. Smith, Supt., receives bids until Dec. 20 for \$130,000, 6% bonds.

Fla., Key West.—Road and Bridge—Monroe County Commrs., D. Z. Filer, Clk., will receive bids until Jan. 10 for \$300,000, 6% bonds.

Fla., Lake Worth.—Inlet—South Lake Worth Inlet Dist. Commrs., A. A. Atwater, Chmn., voted \$125,000 bonds.

Fla., Lake Worth.—Light, Water, Street, etc.—Town sold \$65,000 bonds to J. R. Dur-

Financial News

New Financial Corporations

Ark., Fort Smith.—Home Mutual Building & Loan Assn., increases capital from \$2,000,000 to \$10,000,000; Harry P. Lyman, Sec.

Ark., Morrilton.—Central Building & Loan Assn., capital \$2,000,000, incorporated by J. J. and W. O. Scroggin, Clifton Moses, and others.

Ark., Morrilton.—Central Building & Loan Assn., capital \$2,000,000, incorporated by J. J. Scroggin, Pres., W. O. Scroggin, V.-P.,

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

rance, at par, including \$25,000 for light and water; \$20,000 for street widening, and \$20,000 to retire delinquent certificates. Address The Mayor.

Fla., Madison—Paving and Water—Town voted \$75,000 street paving and water main extension bonds. Advises W. E. Algire, Sec.

Fla., Miami—School—Sidney Spitzer & Co., Toledo, Ohio, purchased \$25,000, 6% bonds, at premium of \$1711.

Fla., Ocala—Road—Marion County contemplates voting on \$1,250,000 bonds; J. E. Walker—County Engr.

Fla., Ocala—School—Ocala Subschool Dist. will vote Jan. 15 on \$100,000 bonds. Address School Commrs.

Fla., St. Petersburg—School—City is contemplating voting \$100,000 school bonds in next few weeks. Address The Mayor.

Fla., Sanford—Bridge—City reported to vote Feb. 12 on \$200,000 bonds. Address City Comm.

Fla., Seabreeze—School—Volusia County School Commrs. will receive bids soon for \$70,000 bonds.

Fla., Winter Park—Paving—Bank of Winter Park purchased \$100,000, 5½% bonds at par.

Ga., Waynesboro—Street Paving—City voted \$45,000 bonds. Address The Mayor. (Lately noted.)

La., Baton Rouge—Municipal Improvements—Union Bank & Trust Co., and Bank of Baton Rouge, were low bidders for \$1,000,000, 5% municipal bonds, at par, accrued interest and premium of \$100; Sewers, \$325,000; streets, \$300,000; storm drainage, \$175,000; fire department, \$175,000; City Hall, \$50,000; opening streets, \$35,000. Address The Mayor. (Lately noted.)

La., New Iberia—Road—Caldwell & Co., New Orleans, La., and L. E. French & Co., Alexandria, La., jointly, purchased \$100,000, 6% bonds, at par plus premium of \$1619.

Md., Baltimore—Bridges, Sewers, Paving, Conduits—City, Howard W. Jackson, Mayor, contemplates \$19,500,000 bond issue.

Miss., Belzoni—Paving—City contemplates \$150,000 bond issue. Address The Mayor.

Miss., Canton—Water and Light—Hibernia Bank & Trust Co., New Orleans, La., purchased \$75,000, 5% bonds at 100.66.

Miss., Jackson—Road—Hinds County, Board of Suprs. sold \$50,000, 5¼% bonds to Provident Savings & Trust Co., Cincinnati, at premium of \$610; also \$100,000, 5¼% bonds to Smith-Moore Co., St. Louis, Mo., at premium of \$1150.

Miss., Marks—Drainage—Panola-Quitman Drainage Dist., Lomax B. Lamb, Dist. Sec., will receive bids until Dec. 20 for \$750,000, 6% bonds.

Mo., Maitland—Fidelity Trust Co., Kansas City, purchased \$20,000 5½% bonds, at par plus premium of \$800.

Mo., St. Louis—Building and Improvements—City, Louis Nolte, Comptroller, received bids for \$500,000, 4½% bonds.

Mo., Steelville—School—City contemplates voting on \$35,000 bonds. Address The Mayor.

N. C., Andrews—Electric Light—Central Bank & Trust Co., Asheville, purchased \$350,000, 6% bonds.

N. C., Bayboro—Road and Bridge—Pamlico County, Board of Commrs., Leo T. Brinson, Clk., will receive bids until Dec. 31 for \$80,000, 5¼% bonds.

N. C., Boone—Street Improvement—Town will receive bids until Jan. 7 for \$15,000, 6% bonds; J. F. Moore, Clk.

N. C., Charlotte—School—City defeated \$2,000,000 bond issue; H. P. Hardin, Supt. City Commrs. (Lately noted to vote.)

N. C., Dallas—Sidewalk Improvements—Town contemplates \$20,000 bond issue; J. P. Hoffman, Clk.

N. C., Fayetteville—Street Water and Sewer—City Clk., sold \$300,000, 5¼% bonds to Braun, Bosworth & Co., Toledo, Ohio, at premium of \$3868. (Lately noted.)

N. C., Fayetteville—School—Cumberland County, D. Gaster, Treas., sold \$183,000, 5¼% bonds to C. W. McNear & Co., Chicago, at premium of \$3157.77. (Lately noted.)

N. C., Granite Falls—Street Improvement—Town, Grant Miller, Clk., will sell \$20,000 bonds Dec. 28.

N. C., Greensboro—School—City will receive bids until Dec. 21 for \$500,000, 6% bonds; E. G. Sherrill, Clk.

N. C., Hendersonville—School—S. Y. Bryson, Mayor, states: "Bond election called off Dec. 3 for amendments, election on bonds will be held later."

N. C., Kinston—School—C. W. McNear & Co., Chicago, Ill., and Weil, Roth & Irving Co., Cincinnati, Ohio, jointly, purchased \$100,000 Graded School bonds at premium of \$1340.

N. C., Newton—School—Catawba County, Board of Commrs., Josephine A. Taylor, Clk., will receive bids until Jan. 7 for \$100,000 5¼% bonds.

N. C., Newton—Court House—Title Guarantee & Trust Co., Cincinnati, Ohio, purchased \$200,000 bonds at premium of \$4170.

N. C., Plymouth—School—Washington County, Board of Commrs., received bids until Dec. 20 for \$100,000, 5¼, \$1000 denom. bonds.

N. C., Raleigh—Paving—Board of Commrs. authorized \$750,000 bond issue.

N. C., Rutherfordton—School—Rutherford County will vote Jan. 26 on \$200,000 Rutherfordton-Spindale Special School Taxing Dist. No. 1-7 bonds; W. G. Harris, Chmn. Board of County Commrs.

N. C., Statesville—Improvement—First National Co., St. Louis, Mo., purchased \$150,000, 5¼% bonds, at 100.45.

N. C., Troy—Water—Board of Commrs., M. A. Nicholson, Clk., will receive bids until Dec. 29 for \$50,000, 6% bonds.

Okla., Pauls Valley—Road—Garvin County will vote Jan. 4 on \$750,000 bonds. Address County Commrs.

S. C., Columbia—School—State, Thomas G. McLeod, Gov., may soon vote on \$12,000,000 school bonds, \$2,000,000 for common school system and remainder for state colleges.

S. C., Florence—Funding—J. H. Hilsman & Co., Atlanta, Ga., purchased \$350,000, 5½%, \$1000 denom. bonds.

S. C., Florence—Sewerage and Drainage—First National Bank of Florence purchased \$350,000, 5½% bonds at premium of \$2500.

S. C., Hartsville—Town, H. E. Beard, Clk., will sell \$100,000 water and sewer bonds on Dec. 28.

S. C., Newberry—Water—City voted \$125,000 bonds; W. W. Cromer, Mayor. (Lately noted.)

S. C., Summerville—School—Board of Trustees of School Dist. No. 18, Dr. Edmund W. Simons, Chmn., will receive bids until Jan. 10 for \$75,000 bonds.

S. C., Sumter—Road—Sumter County Commrs. contemplate voting on \$650,000 bonds.

Tenn., Memphis—Municipal Improvements—City sold \$2,000,000 bonds to Harris Trust Co., Chicago, and National City Co., New York, for following improvements: Waterworks, \$1,500,000; General Hospital, \$150,000; tuberculosis hospital, \$100,000; sewers, \$100,000; Cossitt Library, \$150,000. (Lately noted.)

Tenn., Missionary Ridge, P. O., Chattanooga—Municipal Improvements—City will receive bids soon for \$30,000, 6% bonds; H. L. McFarland, City Mgr.

Tenn., Union—Water, Light and Sewer—Caldwell & Co., Nashville, Tenn., and I. B. Tiggrett & Co., Jackson, purchased \$125,000 5¼% bonds.

Tex., Austin—School—The State School Board purchased \$145,000 5 and 6% school bonds at last monthly meeting.

Tex., Austin—Filtration, School and Incinerator—City voted \$300,000 filtration bonds, \$500,000 school and \$50,000 incinerator bonds. W. D. Yett, Mayor. (Lately noted.)

Tex., Austin—Road—Travis County, George Matthews, Judge, voted \$1,500,000 bonds. (Lately noted.)

Tex., Baird—Road—W. L. Slayton & Co., Toledo, Ohio, purchased \$200,000, 5¼ bonds, at 98.01.

Tex., Big Springs—Sewer—Hanchett Bond Co., Inc., Chicago, Ill., purchased \$60,000 bonds.

Tex., Cameron—Street Paving—City will vote in Jan. on \$85,000 bonds; J. B. White, Mayor.

Tex., Galveston—Water Works, Street Improvements, Grade Raising—City sold at auction \$1,475,000 bonds to S. L. Austin, Austin, and J. E. Garratt, San Antonio, representing Farsons, Sons & Co., New York, Otis & Co., Cleveland, Title Guaranty Trust Co., Cincinnati, and J. E. Garratt & Co., San Antonio. (Bids rejected.)

Tex., Graham—Road—Young County contemplates voting on \$500,000 bonds; W. H. Reeves, County Judge.

Tex., Jasper—Road—E. A. Toebelman, Galveston, Tex., purchased \$125,000, 5¼% bonds at 95.76.

Tex., Lamesa—Street Paving—City voted \$60,000 bonds. Address The Mayor.

Tex., Mason—Road—J. E. Jarrett & Co., San Antonio, Tex., purchased \$10,000 Road Dist. No. 1, bonds at 93.35.

Tex., Memphis—Highway—Hall County, Road Dist. No. 5 voted \$200,000 Highway bonds; A. C. Hoffman, Judge.

Tex., Ranger—Water Improvements—City votes Jan. 15 on \$190,000 bonds for water works improvements. Address The Mayor.

Tex., Rosebud—Street Improvements—City will vote Jan. 2 on \$18,000 bonds; G. W. Lekman, Mayor; Jesse D. Rea, Sec.

Tex., Sulphur Springs—Road—Brown-Crummer Co., Wichita, purchased \$40,000 bonds at 96 and expenses.

Tex., Taylor—Park Improvement—Breg Garrett & Co., Dallas, Tex., purchased \$50,000, 5% bonds, at 97.50.

Va., Farmville—Electric Light and Street Improvement—Finance Comm., E. S. Shields, Chmn., will receive bids until Jan. 8 for \$100,000, 5¼% bonds, including \$50,000 for electric light and \$50,000 for street improvement.

Va., Portsmouth—Improvement—L. G. White, Chmn., Finance Comm., will receive bids until Dec. 27 for \$981,000, 5% bonds.

W. Va., Fairmont—Road—Marion County, Mannington Dist. contemplates voting about Feb. 1 on \$600,000 bonds; Lincoln Dist. contemplates voting about Feb. 1 on \$333,200 bonds. Address Engineer Palmer.

W. Va., Welch—School—Big Creek Dist., Board of Education voted Dec. 18 on \$150,000 bonds. Address Supt. Board of Education.

Financial Notes

First National Bank of Sevierville, Tenn., opened for business Dec. 8 with \$60,000 capital and \$6000 surplus; H. C. Butler, Pres.; A. T. Ingle, Cashier.

Guaranty Bank & Trust Co., Memphis Tenn., increased capital to \$600,000.

Potomac Joint Stock Land Bank, Geo. A. Harris, Pres., Washington, D. C., will issue \$500,000, 5% bonds.

The Bank of South Jacksonville increased capital from \$25,000 to \$30,000.

The Citizens National Bank and Trust Co., Knoxville, Tenn., was taken over by the East Tennessee Savings Bank.

The Service Co. of Atlanta, Ga., purchased controlling interest in Mississippi "L" Insurance Co.; approximately \$120,000 was paid to W. C. Howard, M. M. Cox, M. B. Burnett of the latter company by Henry E. Perry, Pres. of Service Co.

Twin City Bank of North Little Rock, Ark., plans increasing capital from \$50,000 to \$100,000; M. L. Althelmer, Pres.

Trade Literature

A New Time-Study Board.

With the steadily increasing attention given by industrial concerns to time study methods for increasing efficiency and lowering costs of production there is a demand for information along such lines, much of which will be found in a folder issued by the Stein & Ellbogen Co., 31 North State St., Chicago, Ill., describing and illustrating a practical time-study board which they manufacture. This, it is stated, has been developed out of the experience of T. R. Hough, an authority upon time studies. Its value is said to have been fully proved by practical use in one of the largest industrial concerns.

Pulverized Coal in Foundries.

The Grindle Fuel Equipment Company (subsidiary of the Whiting Corporation), Harvey, Ill., has issued Bulletin No. 6 with the title "What Pulverized Coal is Doing for Malleable Foundries." This 16 page publication contains several large pictures accompanied by descriptive matter telling of how pulverized coal, which was first employed for firing annealing ovens, is now applied to melting furnaces, core ovens and boilers. It is stated that the most interesting feature of pulverized coal to the manager or owner of a malleable foundry "is the enormous saving per ton of good castings," as compared with some other methods of firing.

Tank House Equipment.

The Vulcan combination renderer and dryer and odorless rendering installations are fully described and illustrated in a catalogue issued by the Vulcan Iron Works, Inc., Jersey City, N. J. The lines of tank house equipment manufactured at this plant includes, besides the combined renderers and dryers, tanks for cracklings or direct rendering, blood cookers, oleo melting and settling kettles, tallow receiving tanks, with double bottoms or coils, flexible steel press mats, charging and gate valves, vapor condensers, vacuum pumps, boilers, stacks, tanks, crackling roller carts, presses for cracklings, tankage and filtering, special machinery and brass, copper and lead lined tanks. The company has had 25 years' experience in the manufacture of its products which have been improved from time to time to their present stage of superiority.

Use of Power Throughout the Ages.

The Morse Chain Company, Ithaca, N. Y., has issued a most entertaining and instructive booklet of 46 pages telling about power and its use throughout the ages. It is entitled "Power: Its Application from the 17th Dynasty to the 20th Century." On the cover is a picture of Joseph's Well, 1400 B. C., showing a water moving apparatus propelled by an ox. The dynasty mentioned is of Egypt, where the first dynasty is supposed to have existed about 5900 B. C. The uses of power also in Assyria, in ancient Greece, in the Roman empire, during the middle ages throughout Europe, and later down to the present time are described. There are many illustrations both ancient and modern, the latter showing applications of the Morse chain. The contents of the book are taken from an address made by F. L. Morse at the annual convention of the American Mining Congress, Milwaukee, Wis., September 27, 1923.

Valuable Aid for Material Handling.

Bulletin S-101 of the Motorbloc Corporation, Philadelphia, Pa., describes and illustrates the application of the "Motorbloc" in several capacities which the company have developed as results of 18 years experience in the material handling field. A tabulation of capacities, speeds, weights, and electric motor sizes is given on page 3. Striking features are lightness and portability, a motor operated chain block that can be had in all capacities and be operated by a small electric motor

built into a compact unit which can be used anywhere that electric current is available, and in connection with a pendant controller furnished with it. Copies of the bulletin will be sent to anyone on request to the company.

Fine Appreciation of Concrete Roads.

The Koehring Company, Milwaukee, Wisconsin, have issued, framed substantially and attractively, and have distributed to highway engineers, road builders and others interested, a large engrossment of a sketch by B. K. Burns, beginning "I Am a Concrete Road," and describing in nine paragraphs forcefully and attractively the advantages of substantially built highways of concrete. It begins: "I am a concrete road, a thoroughfare of human endeavor. In the years to come no man say where I begin and where I end; I shall go everywhere and come back again." Other extracts are as follows: "By my side spring up prosperous churches and schools and better homes. * * * I shall conquer the waste places, bringing security, comfort, ideals, to the remote places of the world. * * * I shall be the burden bearer of humanity, that the rewards of life shall be greater and its labor less." The Koehring Company are the well known manufacturers of pavers, mixers, cranes, draglines, power shovels, etc. The colored picture surrounding the sketch shows a fine concrete road with a passing automobile.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Sale of Motor Plant and Machinery.

Announcement is made elsewhere in this issue of the receiver's sale of the plant of the Daniels Motor Company at Reading, Pa., on Monday and Tuesday, January 14 and 15, the auction to be conducted on the premises. Besides the real estate, which includes a four-story brick building with power plant, etc., and adjacent railroad facilities, there will be sold to bidders the patterns, patents, jigs, dies, tools, machinery and equipment comprising millers, lathes, drills, grinders, air compressors, etc. Further details will be found in the formal announcement. Complete catalogues may be obtained from the auctioneers, Samuel T. Freeman & Co., 1519-21 Chestnut St., Philadelphia, Pa.

Enlarged Facilities for Business.

The Consolidated Products Company, Inc., dealers in rebuilt machinery and equipment, 15 Park Row, New York, have just completed their yearly expansion reorganization which is a result of the steady growth of their business, and have increased office and warehouse facilities. Several new departments have been added the company now specializing in chemical, oil mill, food stuffs, paint, varnish, textile, laundry, sugar, milling, drying, fertilizer and rubber machinery, each department being in charge of an expert. A large stock of machinery is carried at the Newark, N. J. warehouse and yards of the company which are fully equipped to handle, test and rebuild all types of apparatus. In addition to J. M. Guter and A. M. Kahn, there are associated with the company H. Kahn, W. M. Wolf, J. D. Stein, M. I. Cohen, L. Brill, A. Matthes, and B. M. Todd. During 1923 shipments of machinery were made to all parts of the United States and to many foreign countries.

Crawler Crane for Unloading Lumber.

The Link Belt Company of Chicago reports that the National Lumber & Timber Co., of 5601 Alston Ave., in that city formerly unloaded their cars of lumber by hand, this requiring eight hours time of three good men to unload one car, but now they use a Link-Belt crawler crane which reduces the time from eight to three and one-half hours, more than 50 per cent, so that the three men can unload more than two cars daily. It is further observed that the lumber company expects the men to soon be able to unload a car in two hours and at the same time release some of them for other work. The crane can travel anywhere; it does not need to be on a track.

New Voltage Regulator.

The General Electric Co., Schenectady, N. Y., has developed and will have in production about January 1, a single phase induction voltage regulator of new design. This new regulator possesses several particularly desirable features, including a tank which is highly resistant to rupture, a mechanical structure of increased rigidity with a view to decreasing noise coils with improved bracing to prevent insulation troubles due to line short circuits, greater accessibility of operating mechanism, and improved voltage regulation due to the more rapid correcting of voltage changes. The tank in which the regulator is enclosed is of heavy steel boiler plate with heavy, flattened steel boiler tubes for radiation. It is made round to obtain maximum strength and freedom from distortion. The magnetic brake used on this regulator is a comparatively recent development; it is noiseless, with adjustable spring and operating studs on the brake arms to compensate for wear of the brake shoes.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

Special Department Established.

The Blaw-Knox Company, Pittsburgh, Pa., has announced that Charles K. Wehn is in charge of a special department devoted to Blaw-Knox standard steel buildings and structural steel in Illinois and adjoining states. Mr. Wehn, whose headquarters will be at the company's office in the People's Gas Building, Chicago, will render consultation and personal engineering service.

Special Representative Appointed

Ralph C. Bird has been appointed by the Chain Belt Company, of Milwaukee, Wis., to be its special representative for cement mills. The company is the well known manufacturer of Rex chain, conveyors, transmission machinery and concrete mixers. Mr. Bird is widely known to the trade and for the last six years has been with the Bradley Pulverizer Co., in his new post he succeeds G. O. Curtis, now with the International Portland Cement Corporation, New York.

To Aid Dealers in Sales Work.

The National Steel Fabric Co., 726 Union Arcade, Pittsburgh, Pa., established November 1 a dealer sales department, the principal aim of which is to promote the sales of the company's dealers by means of literature, conventions, expositions, samples, advertising counsel, national advertising, talks with salesmen, calls with salesmen, comparative cost data, etc. The department, which is under the charge of W. H. Shaffers, Jr., will function in all matters regarding orders and shipments, with the view of accelerating correspondence, deliveries, etc. Mr. Shaffers for seventeen years occupied a similar position with the Universal Portland Cement Co.

Now in Large, New Building.

An indication of the steady development proceeding in the South is the new six-story building of the Atlanta branch of the Westinghouse Electric & Manufacturing Co. This edifice, which had a sale value of \$550,000, is held by the company under a long lease. Since its entrance into Atlanta business territory 26 years ago, when one representative having a small office was sufficient to take care of all requirements of the company, the Westinghouse business in the district has grown so that an entire building is necessary for its organization of 239 executives, salesmen, clerks, warehousemen and service men. From this headquarters the company serves customers in Florida, North Carolina, Tennessee, Alabama and Louisiana, maintaining branch offices at Jacksonville, Charlotte, Chattanooga, Birmingham and New Orleans. H. A. Coles is district manager and R. H. Moore office manager.

Direct Factory Branches Established.

The Chain Belt Company, Milwaukee, Wis., manufacturers of Rex chain, transmission machinery and conveying equipment, formerly represented on the Pacific Coast by the Meese & Gottfried Company, San Francisco, has established direct factory branches and warehouses in Portland and Seattle. Arrangements have also been made with the Washington Machinery Depot, Tacoma, Wash., to carry a large stock, and other stocks will be placed in important centers. The Northwest territory, with headquarters at Portland, will be in charge of Allen C. Sullivan, M. E., formerly with the Allis-Chalmers Co., and more recently with the Smith & Watson Iron Works of Portland, as chief engineer. Don B. Catton, formerly with the Meese & Gottfried Co., will be the special sales representative. The Seattle and British Columbia territory will be handled by Wm. F. Nichols out of the Seattle office.

Big Order for Switchboard Units, etc.

The Brooklyn Edison Company, Inc., has recently contracted with the Westinghouse Electric & Manufacturing Co. for a very large order of switchboard equipment to cost approximately \$600,000, and including 97 truck type switchboard units, 149 induction feeder regulators, one 1300 k. w., four unit motor generator set, and eleven 5 k. w. battery charging motor generator sets. The units comprised in this order will contain Westinghouse type B-5 multiple single pole breakers for 4600 volts, three-phase, four wire service. A number of them will be equipped with automatic periodic reclosing relays which automatically reclose the feeder breakers a predetermined number of times after they have been opened.

Branch Office Established.

A. D. Taylor, landscape architect of Cleveland, Ohio, has opened a branch office at 115 North Main St., Orlando, Fla., to cover Southern territory for professional services in his line. This branch, it is noted, is equipped to handle all phases of landscape architecture and town planning, especially subdivisions, parks, memorial drives, country clubs, state parks, recreation areas, shore frontage and other related work. At present there is being developed property about Ponce de Leon Springs, for F. N. Conrad, of Daytona; a casino is being erected including dining hall and other facilities and a bath house of 100 rooms. Future plans contemplate a complete community development. The Rio Vista town-site between Daytona and Ormond is also being developed, work having begun there last winter.

A Draft Regulator that Saves Fuel.

The Southern Draft Regulator Company, Greenville, S. C., report having made a number of installations of their products in office buildings, hotels, banks, industries, hospitals, etc., from which many appreciative letters have come testifying to their efficiency. The Anderson Draft Regulator that is made by the company is very simple, consisting of a return bend attached to the top of the stack or chimney, and terminating in an open top tank of water. The position of the water level controls the draft. In the boiler room an electric gauge shows each half inch change in the water level, enabling the furnace operator to determine the exact draft at all times. The water level is changed by opening and closing valves in the boiler room and the regulator, it is stated, causes complete combustion by providing for uniform flow of the fuel gases. The letters report very large savings of fuel.

Supplying Electrical Needs In Japan.

I. F. Baker, manager for Japan of the Westinghouse Electric International Company, says that before the ashes of Tokyo were cold plans were being prepared to replace the ruined stations of the Tokyo Electric Light Company with their mass of transformers, switchgear, and voltage regulator equipment. A total of 25,000 distributing transformers had been burned and a complete replacement was necessary. The Westinghouse office was destroyed but business has been going on as usual since September 5 at the Imperial Hotel. To supply immediate needs the company was given orders for 7000 transformers for pole mounting to enable small factories and business houses to have electric light and power; they will be in Japan in a few months. There were also ordered 224 automatic regulators, 215 large heavy duty oil circuit breakers, and much heating and cooking apparatus. Kobe has ordered a 6000 KW turbine and another of the same kind will go to the Imperial Government Railways.

Changing from 25 to 62½ Cycles.

The Consolidation Gas, Electric & Power Company of Baltimore has ordered from the Westinghouse Electric & Manufacturing Company two 9000 ampere, 469 r. p. m., 6 phase, 62½ cycle booster converters; two 3075 k. v.-a., 55 degree OISG indoor transformers; and two sets of switching equipment for use on the high voltage side of the transformers. The transformers are for 3 phase, 62½ cycles, with 13,200 volts at high tension and 250 and 275 volts D. C. low tension. The converters are to be started by the star delta method. This is the first substation apparatus of this frequency purchased by the Baltimore company. Future expansion will be made on the basis of 62½ cycles.

Copper and Brass Industry Better.

At the annual meeting Nov. 15 of the Copper and Brass Research Association, 25 Broadway, New York City, directors for the ensuing year were chosen, who, after the meeting, met and elected officers for the year as follows: President, R. L. Agassiz, who is president of the Calumet & Hecla Consolidated Copper Co.; Vice-Presidents, C. F. Kelley, president Anaconda Copper Mining Co.; F. S. Chase, president Chase Metal Works; Walter Douglas, president Phelps-Dodge Corporation; H. J. Rowland, secretary and sales manager Rome Brass & Copper Co.; and U. T. Hungerford, president U. T. Hungerford Brass & Copper Co.; Treasurer, Stephen Birch, president Kennecott Copper Corporation; Secretary, George A. Sloan; Manager, William A. Willis. President Agassiz said that copper consumption (including brass), in this country during the first nine months of this year was greater than during the whole of last year and that the outlook for 1924 is favorable on account of the prospect of continued activity. Copper consumption in the United States is about 70 per cent of the world's production.

To Make Electrical Apparatus in Japan.

Cablegrams from Gen. Guy E. Tripp, chairman of the Westinghouse Board of Directors, and L. A. Osborne, president of the Westinghouse Electric International Company, who are now in the Orient, have been received at the offices of the latter, 165 Broadway, New York, stating that a Japanese electric manufacturing company has been formed under an arrangement between Westinghouse electrical interests and electrical interests in Japan, and it is to be known as the Mitsubishi Denki Kabushiki Kaisha (Mitsubishi Electric Manufacturing Co.), and the reported capitalization is 15,000,000 yen or \$7,500,000. E. D. Kilburn, V.-P. and Gen. Mgr. of Westinghouse International, says that as electrical apparatus is largely imported into Japan it has seemed wise to Japanese interests to begin the manufacture of it and the result of this view was that the important Mitsubishi interests which are engaged in banking, shipbuilding and steel manufacture made a proposal for Westinghouse to supply technical skill and experience to a Japanese manufacturing plant. The result is the new company, and Westinghouse will receive a continuous revenue for service and royalties in place of exports, which it was sure to lose within a few years. The Westinghouse Company has subscribed for part of the stock of the Japanese company. Takata & Co., Japanese importers at 30 Church St., New York, which is Japanese agent for the Westinghouse Company, will be distributor for the Mitsubishi electric organization, and will also import such Westinghouse products as may be supplied from America. Gen. Tripp and Mr. Osborn, now on the way to Shanghai, China, will return home via India and Europe.

District Manager Appointed.

The Pawling & Harnischfeger Company, of Milwaukee, Wis., manufacturers of excavators, cranes and machine tools, recently appointed N. P. Farar as their district manager with offices at 605 Stephen Girard Building, Philadelphia, Pa., and 50 Church St., New York.

Mark Notes a Text for Business.

Enclosing to customers numbers of 50,000 mark German banknotes, one in each letter, the Stow Manufacturing Co., Inc., manufacturers of portable tools, Binghamton, N. Y., says: "Slowly, but surely, the German mark is depreciating in value, just as the cheap tool is in your shop. Stow tools of proven value are sold on merit, with 48 years of experience to their credit. We would esteem it a privilege to serve you." Thousands of these are being mailed to the trade.

Ice and Refrigerating Installations.

The York Manufacturing Co., York, Pa., manufacturers of ice making and refrigerating machinery, report having made since October 25, a large number of installations and sales of their products throughout the country, including 32 in the South at various places as follows: Hyattsville, Md.; Miami, Fla.; Pensacola, Fla.; McAlester, Okla.; Altus, Okla.; Columbia, Mo.; Bowling Green, Ky.; New Orleans, La.; Lubbock, Tex.; Alexandria, Va.; Williston, Fla.; Asheville, N. C.; Richmond, Va.; Frankfort, Ky.; Elkton, Md.; Dinsmore, Fla.; Blackshear, Ga.; High Point, N. C.; St. Petersburg, Fla.; Augusta, Ga.; South Charleston, W. Va.; Baltimore, Md.; Covington, Ky.; Washington, D. C.; New Orleans, La.; Wheeling, W. Va.; Melbourne, Fla.; Winter Garden, Fla.; Kenner, La.; Murfreesboro, Tenn.; Breckenridge, Tex.; Perry, Okla. and Caruthersville, Mo.

Tax Exemption for Industries.

The Gulf, Mobile & Northern Railroad Co., Mobile, Ala., has announced that a five years' exemption from state and county ad valorem taxes is offered to new industries, this following a very liberal and constructive policy by the State of Mississippi. Industries will, it is further stated, have the best of railroad service extended by this line which has 419 miles of railroad through the heart of that state. There are plenty of locations suitable for all kinds of industries, with fine living conditions for both officers and employees. The company, it is also noted, will co-operate in every way to make all industries successful. J. B. Haman is its director of development.

Metal Ladle for Flow Control.

"Anyone familiar with roll foundry conditions," says the Whiting Corporation, Harvey, Ill., "will appreciate the great usefulness of a ladle giving accurate control of the pouring spout. The success obtained by one large Midwest roll foundry in adopting a motor driven ladle for this work marks a distinct advance in roll foundry practice. A 30-ton crane ladle was equipped with a set of Whiting helical worm gearing, including an electric motor for operating the gearing, arranged for control from the crane cage. This has now been in operation for nearly a year and has given complete satisfaction. The control is such that the flow of metal can be regulated from a very small stream to more than 20 tons per minute. Further particulars can be obtained from the manufacturers."

Has Opened Three New Offices.

Several new offices have been opened by the Weller Manufacturing Co., builders of elevating, conveying, and power transmitting machinery, 1820-1956 N. Kostner Ave., Chicago. F. A. Klopp, a graduate engineer, will represent the company at 1401 Lexington

Building, Baltimore, Md.; he is experienced in material handling equipment. O. F. Barklage, of the Industrial Sales & Engineering Co., also a graduate engineer, will be the representative at 627 Grain Exchange Building, Omaha, Neb.; he is experienced as to the handling of raw materials and finished products. The Stratton-Cahoon Co., 809 McIntyre Building, Salt Lake City, Utah, will look after Weller sales in northwestern business territory, especially in relation to needs in the beet sugar districts and in the grain regions.

Atlanta Branch Opened.

Dwight P. Robinson & Company, Inc., New York, have opened a branch in Atlanta, Ga., with offices in the Healey Building, and with W. Rawson Collier in charge. Mr. Collier was for many years with the Georgia Railway & Power Co., and joined the Robinson forces several months ago, going to them from the Poughkeepsie Gas & Electric Co. He is a graduate of the Massachusetts Institute of Technology and has been prominently identified with the work of the National Electric Light Association, the American Institute of Electrical Engineers, the American Gas Association and the Illuminating Engineering Society. The opening of the Atlanta office gives the Dwight P. Robinson Company a total of eight branches, other offices being at Chicago, Pittsburgh, Youngstown, Philadelphia, Montreal, Los Angeles and Rio de Janeiro. The company's recent activities in the South include a wet process cement plant for the Lehigh Portland Cement Co., Birmingham, Ala.; extension to steel plant American Rolling Mill Co., Ashland, Ky.; extensions to power system New Orleans Public Service Co. and the fifth sulphur mining plant which they will build for the Freeport Sulphur Co., Hoskins Mound, Tex. The company is also arranging to build a 300-room club hotel at Palm Beach, Fla.

South Carolina Expend \$20,849,865 in Five Years for Roads and Bridges.

According to figures presented by the South Carolina Highway Bulletin, a total of \$20,849,865 has been expended for the construction of roads and bridges in South Carolina during the past five years. Of this total about \$5,000,000 were federal aid funds. The construction of roads represents an expenditure of \$17,986,082 and that of major bridges \$2,863,783. In addition to construction work, the Highway Commission has also directed the expenditure of a total of \$1,721,000 for maintenance and betterment.

Florida State Road Contracts Total 1600 Miles.

Tallahassee, Fla.—By the end of this year the Florida State Highway Department will have awarded contracts for approximately 1633 miles of roads, according to figures reported by the department. Contracts awarded and to be awarded this year call for a total of 317.95 miles, this total added to 1315.51 miles at the end of 1922, making the total above. In addition to work let this year, there will also be 12,195 feet of bridge work. All types of construction are included.

Denton County Wants Road Bids.

Denton, Tex.—Sealed proposals will be received at the office here of W. E. Durbin, county auditor, until January 11 for the construction of 5.59 miles of gravel road on State highway No. 39 in Denton County. Detailed plans and specifications for the work may be examined at the office of H. T. Brewster, county engineer, Denton, and at the office of the State Highway Department at Austin.

Diversification in a South Carolina County.

The Carolina Canning Co., Inc., H. A. Shaver, president, Manning, S. C., recently organized, writes the MANUFACTURERS RECORD that it is operating a canning and preserving factory and that farmers of Clarendon county have taken most readily to producing such crops of fruits and vegetables as the factory desires for its operation, in place of both cotton and tobacco. It states that these crops can be produced in abundance and only require ninety days to mature after planting. The production of these fruit and vegetable crops it is thought, will have a tendency to change the agricultural and credit systems of the county. Labor is said to be plentiful and cheap.

Dallas Awards \$520,000 in Paving Contracts.

Dallas, Tex., December 15—[Special]—Contracts have been awarded by this city for street paving to cost \$519,469 and involving an area of 134,043 square yards. Among the contractors, all of whom are local firms, are Smith Bros., who received contract for 9786 square yards at \$42,241; Fuller Construction Co., 40,390 square yards, at \$157,235, and the Central Bitulithic Co., 83,868 square yards, at \$319,991.

All of this paving is to be paid by property owners, except the intersections. The work will be in charge of E. A. Kingsley, city engineer.

The Louisiana Highway Commission, Baton Rouge, will receive bids until January 3 for the construction of 5.948 miles of federal aid road in St. Landry Parish, and until the same date for building .95 miles in Richland Parish. Information as to the character of work, location and other details may be obtained from the commission.

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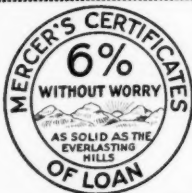
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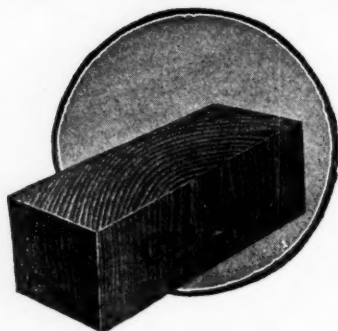
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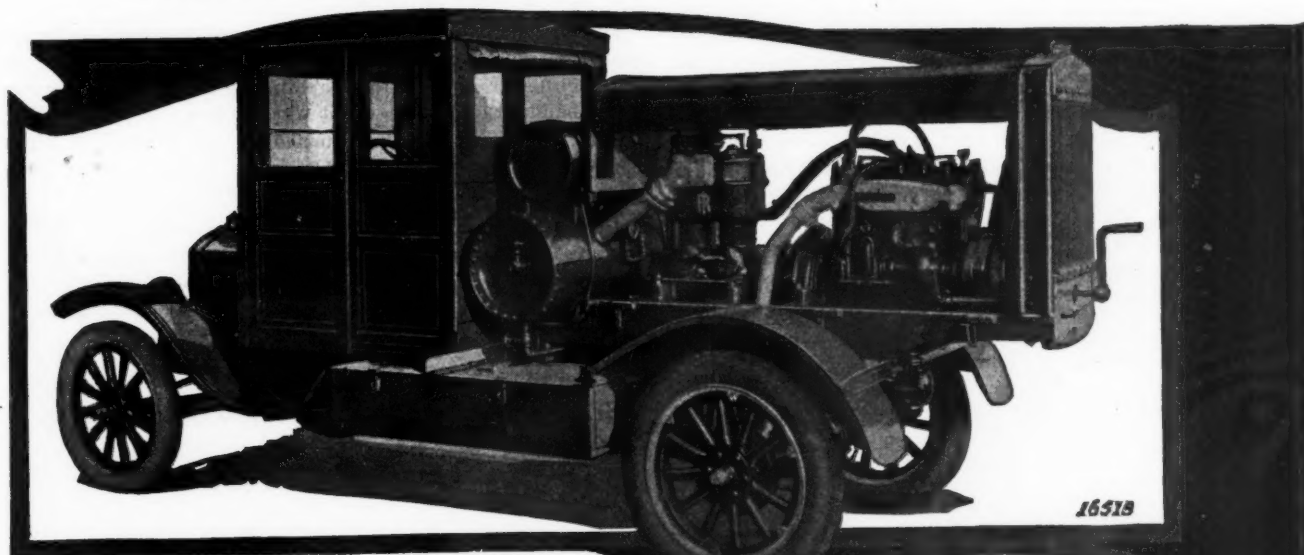
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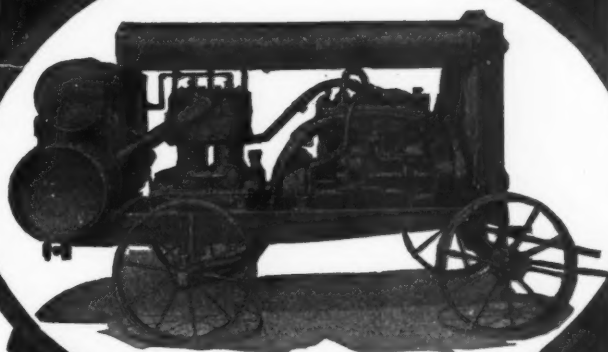
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German Propaganda at Work.

W. S. MILES, Atlanta, Ga.

Signor Nitti, ex-premier of Italy, has written us a book, the perusal of which will prove instructive, not to say entertaining. In "The Decadence of Europe," Signor Nitti tells us that while Germany of military necessity may have committed many acts which the Allies were pleased to style outrageous, she has suffered since the war wrongs and cruelties a thousand times greater than she ever committed during the war. She has been despoiled of all her transferable wealth; negro troops are occupying her territory; she has been robbed of her colonies; native soldiers from Africa are billeted on her citizens; her ships have been taken from her; savage barbarians from the Congo are permitted and encouraged to commit every excess in her occupied cities; her people are starving; uncivilized brutes from Central Africa are violating her women; she has had to surrender her arms; she is being forced to supply white women for negro brothels, etc., etc.

The chocolate soldier is dragged in at every chapter. Whenever the tale of Germany's economic woes begins to grow dull, the colored gentlemen obligingly commit—in the book—some new atrocity. That is why we say in the first sentence that Signor Nitti has written "us" a book, for the repeated mention of negro troops could have no significance outside of America. The continental European draws no color line—he would just as soon be occupied by negro troops as by white, perhaps a little sooner. Any overseas man will testify that the French and Germans saw little difference between black and white skins, and often asked in amused wonder why we considered the negroes to be an inferior race.

The book is an appeal to American sentimentality from cover to cover. The commissions of the United States during the war are exaggerated and praised, as her omissions since the war are excused and praised again. And over all broods the dread horror of negro occupation. Europe is going to the economic bow-wows because of France's exorbitant demands which are deliberately designed to cause the collapse of Germany. America is quite right to refuse credit to Europe. It would be a crime to lend Europe any more money. They would merely use it to build greater armaments. So says Signor Nitti and many of us will agree with him in the matter of credits, but he then, rather inconsistently, suggests that the thing for America to do is to cancel all war debts and give Europe the twelve billion dollars they owe us.

Lest any sympathetic Americans have visions of a holocaust of negro occupation on the Rhine, we refer them to an article entitled, "French Colored Troops in Germany," by P. J. Philip, Staff Correspondent of the New York Times, which appeared in the August issue of Current History. According to information gained from the French Ministry of War, there are 100,000 French soldiers on the left bank of the Rhine. Of these 71,000 are from France proper, 28,000 from North Africa, and 1000 negroes. To quote Mr. Philip, "The men forming the North African units are recruited among the Arabs and Berbers of Algeria, Tunisia and Morocco. These contingents therefore belong to the white race." In the Ruhr territory there are 60,000 troops, all white.

According to Mr. Philip's personal observations, the negro and territorial troops are well disciplined and kept close to their barracks. He inquired about their conduct but heard no bad report nor did he see any complaint against the blacks in German newspapers nor any mention of crime.

Alabama Graphites for Crucibles.

As the result of a series of tests made by the Department of the Interior, through the Bureau of Mines, it has been demonstrated that American bond clays and Alabama graphite can be used to make a superior brass-melting

crucible. Tests showed that crucibles made of these materials gave a service at least equal to the commercial crucibles of the same class which have been sold on the open market, and which are made largely from imported materials.

Ceylon graphite, which has heretofore been considered by many manufacturers to be best for crucible work, proved to be third in order of efficiency. Canadian graphite, which had been recommended very highly because of its structure, was last in order of merit.

During the war, when crucible manufacturers were required to use 20 per cent of domestic graphite, the majority of manufacturers used the Canadian graphite in preference to Alabama graphite because it was composed of larger flakes. In all, seven graphites were tested by the Bureau of Mines, comprising material from Alabama, Madagascar, Ceylon, New York, Texas, Montana and Canada.

Previous investigations of the bureau demonstrated that two American clays, Missouri pot clay and Illinois kaolin, gave better results as bond clays for graphite crucibles than the Klingenberg (German) clay or the Dorset (English) ball clay.

St. Louis to Have New \$500,000 Office Building.

Plans have been drawn by Preston J. Bradshaw, of St. Louis, for a new \$500,000 office building to be erected in that city by a client of the Kempland-Rodemyer Co. under whose supervision the building will be erected and managed. The structure will be located at the southeast corner of



\$500,000 OFFICE BUILDING FOR ST. LOUIS.

Fourth and Locust streets and will be ten stories high. It will occupy a site 66 by 61 feet, which was purchased from the Julius S. Walsh estate through the Mississippi Valley Trust Co., St. Louis.

Bids for Construction in Val Verde County.

Del Rio, Tex., December 15—[Special]—Sealed proposals addressed to W. F. Littleton, Val Verde County Judge, for grading and graveling 12.74 miles of road in Val Verde County will be received at the office of the county commissioners at Del Rio until January 9.

Detailed plans and specifications may be seen for examination, and information may be obtained at the office of G. M. Jowers, County engineer, Del Rio, and at the office of the State Highway Department, Austin.

Will Vote on \$445,000 Bonds.

Fort Myers, Fla., December 15—[Special]—Voters of Fort Myers will ballot on December 28 on the issuance of \$445,000 in civic improvement bonds. The program calls for the following: Water mains, \$80,000; storm sewers, \$70,000; paving, \$90,000; sanitary sewers, \$75,000, and a gas plant, \$130,000.

The West Virginia Hardware Dealers Association is scheduled to hold the first session of a six-day convention in Huntington, W. Va., on January 13.

New Gas Zone in East Smackover Field.

Recent investigative work performed by engineers of the Department of the Interior, attached to the Dallas office of the Bureau of Mines, indicates that a new gas-bearing zone of considerable importance has been developed in the East Smackover oil and gas field in Arkansas. This gas-bearing formation is in the second productive zone, but lies immediately above the main second zone sand, which is producing oil in the West Smackover field. The Bureau of Mines engineers designate this as the "Primm gas zone" to distinguish it from the "Meekin sand," a name which has been applied to the main second zone oil sand of the West Smackover field. Production from the Primm gas zone was first developed on the Primm farm in Sec. 1, T.16S., R.16W. The second zone sand was briefly discussed in the Bureau's preliminary report on the eastern part of the Smackover field, recently published by the State Department of Mines, Manufactures and Agriculture, Little Rock, Ark.

Figures prepared by the Bureau of Public Records, Washington, show that Mississippi constructed 613 miles of surfaced roads during the past year, giving the State a total mileage of 5744 miles of improved roads.



PROPOSALS

BOND ISSUES
BUILDINGS
PAVING
GOOD ROADS

Bids close January 10, 1924.

U. S. Engineer Office, Vicksburg, Miss.: Proposals will be received here until noon, January 10, 1924, for furnishing and delivering 2 steel maneuver boat hulls. Information on application.

Bids close December 29, 1923.

PROPOSALS for construction of United States Veterans Hospital at Livermore, California will be opened at 11 A. M. on December 29, 1923, instead of December 22, 1923, as advertised under date of November 17, 1923. Frank T. Hines, Director, U. S. Veterans Bureau.

Bids close December 26, 1923.

Office of Constructing Quartermaster, Fort Benning, Ga.—Sealed proposals will be accepted at this office until 1.00 P. M., December 26, 1923, and then publicly opened, for the construction of six double sets of Officers' Quarters. Plans and specifications may be obtained on deposit of \$10.00. Right is reserved to accept any or reject all bids.

Bids close January 1, 1924.

\$25,000 6% School Bonds

NOTICE IS HEREBY GIVEN, That the undersigned Clerk of the Board of Public Instruction in and for Sumter County, Fla., will receive bids up to noon on the 1st day of January, 1924, at his office in the Court House in Bushnell, Fla., for Twenty-five \$1000.00 Bonds of Special Tax School District No. 4 of Sumter County, Fla., said bonds dated September 1, 1923, bearing interest at the rate of 6% per annum, interest payable semi-annually, payable both interest and principal at the Hanover National Bank, New York City, said bonds maturing as follows:

Five of said bonds being due and payable September 1, 1933, and one of said bonds on the 1st day of September of each and every year thereafter, up to and including September 1, 1953.

The bidder is required to deposit 1% of his bid as evidence of good faith.

The Board reserves the right to reject any and all bids.

(SEAL) W. T. EDDINS,
Secretary Board Public Instruction, Sumter County, Fla.

RATE: 35 cents per line per insertion.

PUBLICATION DAY: Thursday.

FORMS CLOSE 4 P. M. Monday.

DAY LETTER: When too late to send copy by mail to reach us by 4 P. M. Monday, forward by day letter.

THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—35 cents per line per insertion.

Bids close January 8, 1924.

\$100,000 5½% Town Bonds

Farmville, Va.

Sealed proposals will be received by the undersigned, the Chairman of the Finance Committee of Town of Farmville, Va., until 3 o'clock P. M., on January 8, 1924, for purchase of \$100,000 par value of bonds of said town, of which amount \$50,000 par value will be known as ELECTRIC LIGHT IMPROVEMENT BONDS, SERIES H., and \$50,000 par value will be known as STREET IMPROVEMENT BONDS, SERIES H. All of said bonds will bear interest at 5½ per cent per annum, payable semi-annually, on January 1st and July 1st. said bonds to be in denominations of \$1000 each, bearing date of January 1, 1924, and payable 20 years after date, at the Hanover National Bank of the City of New York.

All bids must be accompanied by a certified check for \$1000, payable to the Town of Farmville, Va., said bids to be opened at the regular meeting of the Town Council on the 8th day of January, 1924, at 8 o'clock P. M.

The Council reserves the right to reject any and all bids, in whole or in part.

(Signed) E. S. SHIELDS, Chairman of Finance Committee of Town of Farmville.

Bids close January 10, 1924.

\$75,000 Municipal Bonds

Summerville, S. C.
\$75,000, 20-year coupon Bonds of School District No. 18 (Summerville), of Dorchester County, S. C., denomination \$1000; bonds and coupons payable in New York. Bids solicited for entire, or part of, issue on basis of 5, 5½ and 6 per centum per annum, payable semi-annually. Bids to be submitted by 12 M. on January 10, 1924, to Edmund W. Simons, Chairman of Board of Trustees, Summerville, S. C. No bid considered unless accompanied by certified check for \$500, to be returned unsuccessful bidders, applied account successful bidder, and forfeited on non-compliance. Right reserved by Trustees to reject any and all bids.

Bids close January 3, 1924.

Bridge Construction

De Land, Fla.
Sealed proposals will be received by the Board of County Commissioners of Volusia County, Fla., at the office of the Clerk of the Circuit Court of Volusia County, De Land, Fla., until 10 o'clock A. M., on Thursday, January 3, 1924, for the construction of a steel drawbridge with concrete pivot pier and creosoted pile trestle bent approaches and draw pier fenders over the Indian River North at New Smyrna, Fla.; 45,000 cu. yds. of earth embankment; 400 cu. yds. of concrete or rock masonry; one creosoted timber trestle bridge across Callalissa Creek and 9500 cu. yds. of excavation.

Bids will be received on the whole, or any section of the work.

Plans and specifications may be examined at the office of the Engineer in the Lutz Building, New Smyrna, Fla., or for the sum of \$10 may be obtained on applying at the same place.

Each bidder must accompany bid with a certified check, or bidders bond for an amount not less than 5 per cent of the bid, drawn to the order of Ben D. Thursby, Chairman of the Board of County Commissioners of Volusia County.

The right is reserved to reject any and all bids in whole or in part.

BEN. D. THURSBY,
Chairman of the Board of County Comrs.
(SEAL) SAM'L D. JORDAN,
Clerk of Court.

N. A. HOTARD,
Engineer.

Bids close January 10, 1924.

Water Works and Sewers

Asheboro, N. C.
Sealed proposals will be received by the Town Council of Asheboro, N. C., at Town Clerk's office up to 2 P. M., January 10, 1924, for water works improvements and sanitary sewer extensions.

The work embraces the following approximate quantities:

- 500,000 gallon filter.
- Repairs to old filter.
- 30,000 gallon steel tank on 40-foot tower of steel.
- 250,000 gallon concrete reservoir.
- 250 G. P. M. centrifugal pump.
- 750 G. P. M. centrifugal pump.
- 200—Feet 12-in. cast iron pipe.
- 1800—Feet 10-in. cast iron pipe.
- 1600—Feet 8-in. cast iron pipe.
- 26082—Feet 6-in. cast iron pipe.
- 13—Tons special castings.
- 3—12-in. gate valves.
- 2—10-in. gate valves.
- 5—8-in. gate valves.
- 36—6-in. gate valves.
- 45—Valve boxes.
- 42—Fire hydrants.
- 28765—Feet 8-in. sewers with appurtenances.
- 3300—Feet 10-in. sewers with appurtenances.
- 2—Septic tanks.

Plans and specifications are on file with Town Clerk and Engineers. Copies of specifications can be obtained from Engineers on deposit of \$5.00 which will be returned to bona fide bidders.

Set of plans can be secured from Engineer on payment of \$25.00.

Certified check for 5 per cent of the amount of bid must accompany bid.
The right is reserved to reject any or all bids.

ARTHUR ROSS, Mayor.
JAMES N. NEELY, Clerk.

J. B. McCRARY ENGR. CORP.
Engineers.

Bids close December 26, 1923.

Trunk Sewer

DEPARTMENT OF PUBLIC IMPROVEMENTS.
SUBDEPARTMENT OF HIGHWAYS
ENGINEER.

Baltimore, Md., Dec. 12, 1923.

Sealed bids or proposals in duplicate addressed to the Board of Awards, in care of the City Register, for building DISTRICT 24-B TRUNK SEWER, as embraced in Sanitary Contract No. 208, will be received by the City Register, at his office, City Hall, Baltimore, Md., until WEDNESDAY, DECEMBER 26, 1923, AT 11 O'CLOCK A. M.,

at which time and place they will be publicly opened by the Board of Awards and read.

Bond in the amount of the contract price will be required of the successful bidder.

Certified check of the bidder on a clearing house bank, drawn to the order of the Mayor and City Council, in the amount of two thousand dollars (\$2000) must accompany each bid.

The Board of Awards reserves the right to reject any or all bids.

Checks of the unsuccessful bidders will be returned.

Plans and specifications and bidding forms for this work, which comprises approximately 4200 feet of sanitary sewers from 8 inches to 27 inches in diameter, may be obtained at the office of the Highways Engineer, Room 10, City Hall, Baltimore, Md., upon deposit of \$5, which deposit will be returned only if the plans and general specifications in case a bid is submitted or the plans, general specifications and special specifications in case no bid is submitted, are returned to the office of the Highways Engineer in good condition before the time set for opening the bids.

BERNARD L. CROZIER, Highways Engineer.
STEUART PURCELL, Chief Engineer.

Approved:
HOWARD W. JACKSON, President Board of Awards.
GEORGE E. KIEFFNER, Assistant City Solicitor.

Bids close January 14, 1924.

County Home

Lumberton, N. C.

Sealed proposals will be received by the Board of County Commissioners of Robeson County, N. C., at their office in the city of Lumberton, N. C., at noon January 14, 1924, for the erection and completion of a group of buildings which in their entirety will constitute a County Home near Lumberton, N. C.

Plans and specifications may be seen and estimates made without costs at the following places:

- Office of Wilson & Berryman, Columbia, S. C.
- Office of Wilson & Berryman, Wilson, N. C.
- Office of Builders' Exchange, Columbia, S. C.
- Chamber of Commerce, Raleigh, N. C.
- Chamber of Commerce, Greensboro, N. C.
- Chamber of Commerce, Charlotte, N. C.
- Office of E. J. Britt, County Attorney, Lumberton, N. C.

They may also be obtained upon application to Wilson & Berryman, Columbia, S. C., on deposit of Twenty-Five (\$25.00) Dollars as a guarantee that they will be

returned in good condition and without expense within five (5) days of the date set for the submission of bids, and that a bona fide bid will be made. When these conditions are met, the deposit will be returned, otherwise it will be retained by the Architects.

Sub-contractors and material men may secure such portions of the plans and specifications as they may desire at current blue print rates.

Each bid must be accompanied by a certified check or bid bond for Two Thousand \$2000.00 Dollars as a guarantee that if accepted, the contractor will enter into a contract and give bond in the form of the American Institute of Architects (3rd Edition) in an approved surety company for an amount not less than one-third of the contract price, covering the contract and its guarantees for a period of twenty-seven (27) months.

The right is reserved to reject any or all bids.

JNO. W. WAREL, Chairman.

Bids close January 8, 1924.

Court House and Jail Equipment

Wilson, N. C.

Sealed bids will be received by the Board of Commissioners of Wilson County for the erection of a Court House, and at the same time for the jail equipment, which said bids shall be separate.

All bids must be filed with Henry B. Lane, Chairman of the Board of Commissioners of Wilson County, on or before 10 o'clock A. M. Tuesday, January 8, 1924. All bids will be opened and considered in the office of the Board of County Commissioners of Wilson County at the Court House in Wilson, N. C. on Tuesday, January 8, 1924.

Copies of plans and specifications for the Court House and jail equipment may be obtained from Mr. Fred A. Bishop, Architect, Petersburg, Virginia, upon the deposit of Fifty Dollars (\$50.00), guaranteeing the return of the plans and specifications and the submission of a bid, which deposit will be forfeited upon non-compliance with the terms hereof. Each bidder will be required to deposit a certified check upon some Bank or Trust Company in the State of North Carolina, for \$2500.00, as a guarantee of the execution of the contract and the giving of the bond as required.

The successful bidder will be expected to execute the contract and give the bond as required by the laws of the State of North Carolina, within ten (10) days from the award.

The right to reject any and all bids is reserved.

This December 3, 1923.

HENRY B. LANE, Chairman.
Bd. of Comms. of Wilson County,
FRED A. BISHOP,
Petersburg, Va., Architect.



CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS WATER POWER, MISCELLANEOUS PROPERTIES

SOUTHERN INVESTMENT Opportunities. We offer timber lands, coal lands, mines, sawmills, cotton mills, industrial plants, ice plants, public utilities, quarries, etc. Hodgson Investment Co., Knoxville, Tenn.

IRON ORE

FOR SALE—Over 300,000,000 tons iron ore, bargeable to Muscle Shoals, mined by steam shovel, large manganese spread. C. G. Samuel, Athens, Tenn.

COAL LANDS AND MINES

FOR SALE OR EXCHANGE—2500 acres unimproved coal land in tracts, \$35 per acre; has several seams; top drift; adjacent railroad, mines, gas and oil. Write J. CAVANAGH, McAlester, Okla.

MOULDING AND SILICA SAND LAND FOR SALE
Moulding and Silica Sand Land
Address T. J. Nertney,
Ottawa, Ill.

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Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisement accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c. per line; 300 lines, 26c. per line; 500 lines or more, 25c. per line.

TIMBER AND TURPENTINE PROPOSITIONS
WHEN IN THE MARKET for a saw mill, timber or turpentine proposition, write the
LAND MARKET,
Palatka, Fla.

TIMBER AND TIMBER LAND

TIMBER AND MILL MEN—Have fine Mahogany tract in Mexico. Other hardwoods there and in the South. Good transportation. Write me your needs, I want to supply them. Wm. S. Bye, Cedar Rapids, Iowa.

ESTATES AND RANCHES WANTED

WANTED—Large Southern estates and Western ranches, stocked and equipped to exchange for Northern and Eastern income property showing around 10 per cent net. \$50,000 up. Arthur M. Connor, 726 14th Street, N. W., Washington, D. C.

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FLORIDA—Playground of the Rich; Paradise of the poor. The fastest developing State in the Union, and Roger Babson, the great business statistician, says that TAMPA is destined to be the greatest city in the Southeast. Come and be one of us. We have a Home, Grove or Farm for you. Send today for booklet "Largest Orange Tree in the World," and list. Tampa-West Coast Realty Co., (Inc.), Opp. Post Office, "Since before the war," Tampa, Fla.

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MR. BUSINESS MAN or SPORTSMAN, how would you like a winter home site on deep salt water among giant oaks, magnolias, pines, green lawns, where you can grow flowers, oranges and grapefruit? Within two hours' reach by automobile of duck, quail, deer, turkey and other wild game. Excellent climate and health. Our chief industry is growing vegetables for shipment in car and train lots in winter and early spring. Plenty of laborers. Good churches, schools, and real American citizens. Write us for further information.

LAKE REALTY COMPANY,
Beaufort, S. C.

FOR SALE—10,000 acres unimproved land, in one body, 6 miles on public road from Georgetown, S. C. Suitable for colonization purposes for farms, cattle range or hunting preserve; deer, turkeys, birds and other game on property. For price and full information write to W. D. MORGAN, Georgetown, S. C.

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"FARMS TO FIT." All kinds, easy terms. Booklet free. Magnificent 2230 acre estate, \$90,000. Easily worth \$200,000. Ponton, The Farm Tailor, Box 343, Bedford, Va.

VIRGINIA—FOR SALE 1800 acres, in Stafford County, Va., 1500 acres heavily timbered. 175 acres in pasture and cultivated. 125 acres in marsh. Two creeks running into Potomac River, excellent hunting, ducking, fishing and boating. Large club house equipped for occupancy; two tenant houses; gasoline engines, and assortment of farm implements. Fine club and game proposition. Timber worth third of price.

RICHMOND TRUST CO., Richmond, Va.

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EVER-TYTE AND ZELCO PISTON RINGS with patented Zelco Process saves Gasoline, Oil, increase capacity, prevent cylinders from wearing out of round, lessen Carbon; after using, make arrangement with us to sell them; are looking for distributors with mechanical knowledge; made up to 80 inch; used in Locomotives, Boats, Engines, Compressors, Ice Machines, Pumps, Trucks, Tractors, etc.; real opportunity; all or part time.

Ever-Tyte, St. Louis.

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW,
Harlow Building, Colorado Building,
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FIFTEEN THOUSAND DOLLARS CASH and other considerations will get the VERY BEST GARAGE proposition in VIRGINIA, and A. Lee Knowles, at Staunton, Va., has it for sale. THIS IS THE REAL THING. KNOWLES KNOWS.

AN EXPERIENCED lumberman without capital, wishes to re-enter the lumber business about January 1, by operating several small mills in Virginia, cutting pine and hardwood, and wants to get in touch with party who will finance. Address No. 6264, care Manufacturers Record.

WANTED CAPITAL to develop town site, Fair Bluff, N. C. Summer and winter resort. Address J. E. DICK, Fair Bluff, N. C.

WANTED CAPITAL to develop town site, have 640 acres that two big railroad crosses on, in S. E. Okla., surrounded by Coal, Oil, Gas and rich farming. For particulars write J. E. Cavanagh, McAlester, Okla.

WANTED—Party to sell or organize company to operate attractive West Virginia land and timber proposition. Address No. 6238, care Manufacturers Record, Baltimore.

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VALUABLE TEXT-BOOKS on the "Money Question"—The most vital question affecting the welfare of the people. The Monetary Educational Bureau, Kellogg Bldg., Washington, D. C.

SOUTHERN
MILL STOCKS
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25 years' experience in this field.
F. C. ABBOTT & CO.,
Charlotte, N. C.

INDUSTRIES WANTED

HERNDON, VA., the best location in Northern Virginia for young enterprises that intend to grow. What do you make that the farmers, the dairymen and the fruit growers need for the production and distribution of their output? We offer railroad, large electric power and water facilities. Eight miles from Superpower plant site at Great Falls. Address Chamber of Commerce.

INDUSTRIAL PLANTS

WE HAVE FOR SALE OR RENT two buildings in the manufacturing district with ample side track facilities suitable for fertilizer plant or other manufacturing lines. The property consists of two-story brick building with power plant in good condition and ample warehouse facilities. Information furnished to interested parties.

MURPHEY, TAYLOR & ELLIS, Realtors
Macon, Georgia

THE CITIZENS of the Town of Stuart, Va., have just completed a rigidly constructed building 52 feet wide and 317 feet long in accordance with the plans for a cotton mill and now desire some good cotton or knitting mill concern to take over and operate the same. This property is located at Stuart, Va., at the terminus of the Danville & Western Railroad, 75 miles west of Danville, Va. They have a 10-year power contract at 1 1/4 cents per K. W. hour, maximum amount of power called for in contract is 150 horsepower for 24 hours per day. Power transmission line is complete to the building and transformers ready for installation. Town water on property at low rate. Plenty of excellent labor at 50 per cent less than cost of same at other cotton mill towns. Excellent freight rates and very low taxes. Plenty of land to go with building. Owners of property will lease, sell cheap or will take value of same in stock. For further information communicate with PATRICK LAND & INVESTMENT COMPANY, INC., Stuart, Va.

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RICHMOND, VA.—Progressive City of the South. Sites for warehouses and industrial plants, with or without trackage, for sale. Two developed warehouse properties, centrally located for rent. RICHMOND TRUST CO., Richmond, Va.

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"The Book for Inventors and Manufacturers." FREE. WRITE LACEY & LACEY, Dept. 15, Washington, D. C., Est. 1869.

AGENCIES WANTED

TRAVELING SALESMAN—Twenty years experience in Md., Va., Pa., desires mfg. lines only; thoroughly acquainted in this territory; best of references. Address No. 6230, care Manufacturers Record, Baltimore, Md.

SITUATIONS WANTED

THOROUGHLY TRAINED and familiar with all phases of accounting, cost finding and industrial engineering; office executive; organization and efficiency; sales plans and ideas. Mature in years and experience; equivalent to college education, but training has been principally in school of experience. Am now and have been for five years with firm of public accountants and tax specialists that demands and receives the maximum of fees and gives services justifying them. Twenty years practical experience prior thereto. Address No. 6262 care Manufacturers Record, Baltimore, Md.

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Technically trained college man with responsible estimating, design and executive experience desires position with manufacturer or distributor of engineering or building materials and supplies where a knowledge of engineering would be helpful. Sales work preferred. Very best references. Address No. 6261, care Manufacturers Record.

MANAGER—BUYER. Extensive experience. Good organizer and plant supervisor. Would invest. Address No. 6249 care Manufacturers Record, Baltimore, Md.

MEN WANTED

Salaried positions \$2500 to \$25,000 upward; executive, technical, administrative, engineering, manufacturing, professional managing, financial, etc., all lines. If you are qualified and receptive to tentative offers for a new connection you are invited to communicate in strict confidence with the undersigned who will conduct preliminary negotiations for such positions. A method is provided through which you may receive overtures in confidence, without jeopardizing present connections, and in a manner conforming strictly to professional ethics. Send name and address only; preliminary particulars will be sent without obligating or compromising you in any way. R. W. Bixby, Inc., 403 Lockwood Building, Buffalo, N. Y.

GENERAL MANAGER—Hardwood lumber mill, large property; state qualifications, age and salary expected. Address P. O. Box 820, Cincinnati, Ohio.

FIRST CLASS leather belting manufacturer, requires representative, experience necessary, good opportunity for the right man. Address No. 6250 care Manufacturers Record, Baltimore, Md.

SALESMAN—High grade salesman with mechanical training to sell Davenport Heavy-duty Oil Engines to dealers and industrial plants. Opportunity to earn big commissions. Full time and side line men wanted. Write Dept. 309, Davenport Mfg. Co., Inc., Davenport, Iowa.

ESTABLISHED construction company, doing general building construction, requires the services of an experienced estimator. State experience and salary expected in first letter. Communications confidential. No. 6256, care Manufacturers Record.

SALESMEN—Newly organized corporation handling construction machinery and equipment requires four salesmen to sell contractors and counties North and South Carolina. Must be producers. Auto furnished. Commission and drawing account. Sales record required. Southern Machinery and Equipment Corp., 500 Masonic Temple, Raleigh, N. C.

MACHINERY AND SUPPLIES

FOR SALE

At a sacrifice 2 Merriman Asphalt Plants. Price low for quick sale. P. O. Box 1488, Greensboro, N. C.

FOR SALE—Two Scotch Marine Boilers 200 h. p., 150 lbs. steam pressure. Boilers in good condition. Paducah Water Company, Paducah, Ky.

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A RARE OPPORTUNITY

Splendid modern plant located in leading industrial city in Middle Atlantic States. Plant is heavy mill construction, eight stories, 48x156 feet, maple floors, sprinkler system, fine heating system, two elevators, splendid daylight and fine electric lighting system installed in building. Floors are 12 foot pitch and building carries very lowest rate of insurance. Located in good labor section on main line Southern Railway with spur track serving building. Splendid type labor available in ample supply. This plant adapted to most any type of manufacturing and can be purchased at attractive price. Those contemplating location for new enterprise or branch plant will do well to investigate.

Address A-318 Care of Manufacturers Record
Baltimore, Md.

Operating Mine In Southern Appalachian Field FOR SALE

FULLY EQUIPPED, ELECTRIC HAULAGE. ONE THOUSAND TONS DAILY OUTPUT—HIGH GRADE BY-PRODUCT. GAS DOMESTIC AND STEAM COAL. NON-UNION FIELD.

Address
A-314 Care of Manufacturers Record
BALTIMORE, MARYLAND

For Sale FINEST BOUNDARIES OF VIRGIN TIMBER In Western North Carolina and East Tennessee in small or large tracts

EXCELLENT HARDWOODS, SPRUCE and HEMLOCK
MARKET PROVIDED FOR BY-PRODUCTS

A-No. 1 PROPOSITIONS for LARGE OPERATORS

WHO ARE SEEKING NEW FIELDS OR
FOR PORTABLE MILL OPERATORS

ALSO GRASS and MOUNTAIN FARM LANDS
SALES DIRECT BY OWNER

NO COMMISSIONS
BOX 428 CANTON, N. C.

NOTICE OF CLEARING OF LAND AND SALE OF TIMBER

The City Council of the City of Dothan will receive bids until

7:30 o'clock P. M., January 7, 1924

for the sale of such timber as would be merchantable, and the clearing of approximately 1000 acres of land, in what is known as the basin at the Hydro-Electric Plant, Chalkers Bluff, Geneva County, Alabama, Project No. 52.

This the 14th day of December, 1923

R. W. LIENBY, City Clerk

SAMUEL T. FREEMAN & CO.
1519-21 Chestnut Street

AUCTIONEERS
Philadelphia

RECEIVERS' SALE IN EQUITY

In the District Court of the United States for the eastern district of Pennsylvania. In Equity. December sessions 1922. No. 2685.

Valuable Plant

Of the

DANIELS MOTOR COMPANY

At Reading, Pa.

Monday, January 14th, and Tuesday, January 15th, 1924

at 10 A. M. EACH DAY

On The Premises

Real Estate—Four story brick "U" shaped Factory, with power plant, elevators, railroad siding, large suite of offices and lot 176½ x 229½ feet, with frontage on the Reading railroad, Third street and Thorn street. Also lease on the first floor of the adjoining property.

Service Rights and Good Will—Consisting of large and valuable assortment of parts for repairs of cars on the road. Patterns, patents, special jigs, dies, and tools, right to receive mail, etc.

TO BE SOLD IN PIECEMEAL LOTS ONLY

Machinery and Equipment—Comprising a modern Machine Shop recently equipped with Cincinnati plain and vertical millers, Walcott, Lodge & Shipley lathes, Beckford radial drills, Head grinders, Garvin profiler, Moline hole hog, Brown & Sharpe universal grinders, Bullard turret lathe, Brown & Sharpe hobber, Gould & Eberhardt shaper, generator sets, motors, etc.; Blacksmith Shop, small tools, nickel plating outfit; Wood-working Equipment, including tenoner, boring machines, dado machines, shapers, jointers, planers, saws, etc.; Metal Working Equipment, including hammers, saws, grinders, polishing lathes, air compressors, etc.

Stock and Fixtures—Comprising sheet steel and aluminum, nuts, bolts, lumber, leather, upholstering materials, large number of bodies, some completed and some partially completed, also office equipment, oak and mahogany, typewriters, adding machines, calculators, etc.

By order of C. VERNON BRADFORD } Receivers
GEORGE C. TENNEY }

MORGAN, LEWIS & BOCKIUS, Attorneys for Receivers, 934 Land Title Bldg., Philadelphia. Catalogue with terms, full description of property and itemized list of equipment be mailed upon application to

SAMUEL T. FREEMAN & CO.
AUCTIONEERS

1519-21 Chestnut St. Philadelphia, Pa.

HIGHEST GRADE MACHINE WORK COMPLETE MACHINES OR PARTS IN LARGE QUANTITIES ESPECIALLY PATENTED ARTICLES

We have one of the largest, most modern and best equipped machine shops and foundries in the South, employing only best skilled mechanics, familiar with accurate micrometer work. Send blueprints for estimates.

UNITED CIGARETTE MACHINE COMPANY, INC.
Box 748, LYNCHBURG, VA.

Southern Cities Needing More Factories Can Get Them by Advertising

Their Advantages and Inducements
in the
Classified Opportunities Department
of the
MANUFACTURERS RECORD

See Advertisement and letter of Basic, Va.
below for further proof

BEFORE LOCATING ANYWHERE, Investigate Basic, Va. Elevation 1490 feet. Best water in the State; mild climate. Electric lights, sidewalks, sewers; population 2300. Write J. I. Rhodes, Chrmn. Finance Com., Basic, Va.

J. I. Rhodes, Chairman, Finance Committee, Basic City, Va. "Am glad to advise that we had exceptionally good results from our previous small advertisement which shows beyond doubt that the Record reaches the people its name implies."



More Linde Service for Linde Customers

The engineering help which the Linde field organization gives to Linde customers has grown to be an important and valuable part of Linde Service.

To augment this personal service rendered by our field organization, Linde offers its customers a monthly magazine—

OXY-ACETYLENE TIPS

This magazine contains well illustrated accounts of new or interesting applications of the process, showing how Linde Service aids in solving customers' problems. It is an integral part of Linde Service, and will be sent free to Linde customers on request.

For over a year, "Oxy-Acetylene Tips" has had a limited circulation as a means

of testing its value. The character of its contents has been well illustrated by the many articles from its pages reprinted in trade papers. The November issue tells in some detail the story of its first year.

Every Linde user should write the nearest Linde District Sales Office, requesting a copy of the November issue.

32 plants and 62 warehouses

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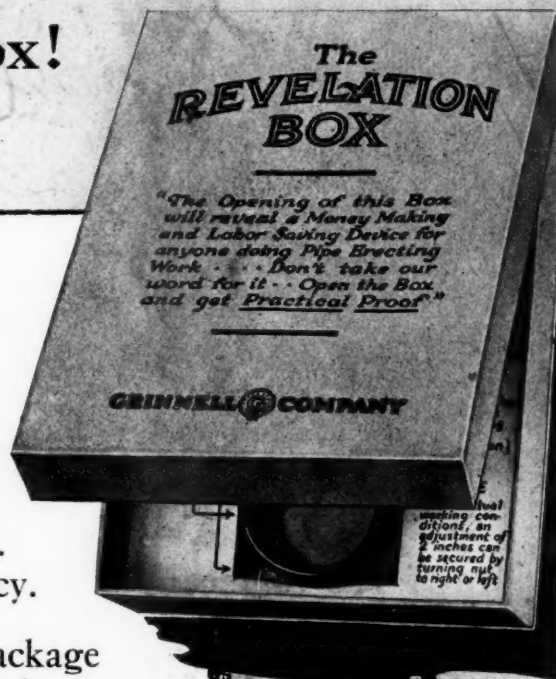
Economies in installation costs made possible by the new Grinnell Adjustable Hanger are unparalleled. It's a revelation in hanger-efficiency.

That's why we've called the package which will bring you a sample of this hanger the Revelation Box. Don't fail to send for it!

Find out what this hanger can do for you. Find out now so that you can take advantage of its economies on your next piping installation job. You'll not only be able to put through the work at lower cost but you'll install a more efficient and satisfactory system than is possible with any other hanger.

And realize that the sample we'll send you in the Revelation Box is only one of a complete line of improved hangers especially designed for the plumbing and heating trades and especially adapted for distribution through jobbers.

Send for a Revelation Box today. Don't put it off. Fill out and mail the coupon now.



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